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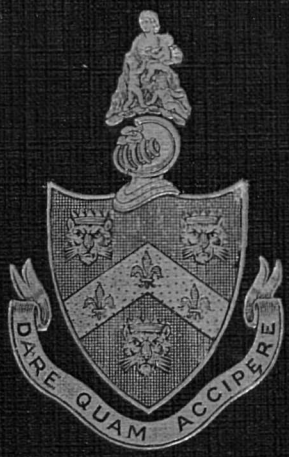

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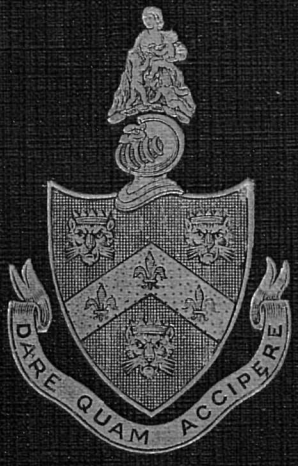

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PASSIM

SINCE the beginning of the New Year the Senior Surgeons have each been taking one out-patient session a week in the afternoon, which is designed to complement the morning clinic presided over by the Assistant Surgeons. This seems to be an entirely admirable scheme, for it offers undoubted advantages to all concerned. Perhaps most important of all it will, by reason of the fewer numbers of patients attending, mean better teaching to the student and a greater chance of his seeing them in comfort without the constant and irritating effort of having to elbow others out of the way, a state of affairs that has existed too long in our surgical out-patient department. The teaching ought now to be more varied, less hurried and therefore more digestible than it has been in the past when the tutor was working so hard against time. Members of staff here and general practitioners will now have direct access for their patient to any surgeon they desire, the surgeons, for the extra time and work involved, will have the advantage of studying their results and following up their cases more accurately.

Perhaps now is the time to suggest that better facilities be provided for the examination of patients, for the existing couches, quite inadequately spaced and screened with shrunken curtains, might with comparatively small cost be transformed into something more worthy of a hospital of this size. Might it not be a sound idea also to limit the number of students attending any one session in order to give those that are present more space to move about in an orderly manner.

ON Sunday, January 22nd, at 8.45 p.m., there is to be a broadcast appeal on behalf of the Hospital, which is to be given by the Matron, Miss E. P. MacManus. Lord Nuffield, the Treasurer, originally intended to make this appeal, but his visit to South Africa has made it impossible for him to do so. The Matron will appeal for £214,000 for the rebuilding of the Surgical Block, and also for an extra £10,000 toward hospital maintenance, which, if it is subscribed, will qualify us for a further donation of the same sum. We wish Miss MacManus good luck in her appeal.

IT is with great pleasure that we see the name of Mr. Frank J. Pearce, one of the Consulting Dental Surgeons to the Hospital, as having been submitted by the Prime Minister, in the New Year's Honours List for the bestowal of a Knighthood. Sir Frank Pearce was educated at Kingswood School, Bath, and entered Guy's in 1897. After obtaining his L.D.S. he held an appointment as Dental House Surgeon. He was then the first man to be awarded the Dental Travelling Scholarship, with which he passed to the University of Pennsylvania, where he obtained his D.D.S. On his return he was appointed to the Dental Staff. As a teacher he was always pleasant, courteous, popular and efficient. During the War he served as a dental surgeon in charge of patients with gunshot wounds of the face and jaws. He has constantly worked on arduous public service in the offices which he has held in the British Dental Association. This service was recognised by his election to the Presidency of the Association in its Jubilee Year, when dentists from every part of the British Empire came to London to participate in the proceedings. We hope that Sir Frank Pearce will live long to enjoy his well-earned honour.

WE print elsewhere the regulations that pertain to the admission of patients to paying cubicles in the general wards of the Hospital. The fact that the Hospital has found it necessary to introduce the system of having such patients will come as a shock to a large number of our readers. For a long time now it has been apparent that Guy's no longer caters solely for the population of the Borough and Bermondsey, but has extended the

radius of its magnetism half across England, and very recently half across Europe, and this change in its status has been accepted without question so long as one is convinced that the circumstances of the patient are such as that he cannot be regarded as unfairly excluding from the benefits of this Hospital those within whose neighbourhood the Hospital stands, and on whose loyalty and generosity the Hospital has so long depended.

With the new scheme, approximately one-tenth of the Hospital beds are to be given over to the use of patients with incomes which vary between £275 and £450 a year. These people are to pay five guineas a week, a sum which actually does not amount to the average weekly cost to the Hospital of one patient, for a bed which is screened off from the rest of the ward and for the sort of attention that the "tray" patient now gets—a little more food, a little more experienced nursing, and daily visitors. It is the intention at the moment that they should be taught upon in the ordinary way, but it will be noticed, in the regulations, that there is a clause that clinical demonstrations for the instruction of medical students *may* be held *at the discretion of* the member of the Staff concerned. We are not alone in fearing that there may be an appreciable diminution in the number of teaching cases, that the registrars may be handicapped considerably by the unwillingness of these patients to be the subject of the multiple examinations that is, of necessity, the custom in a teaching hospital. There will be required a larger amount of tact, patience and good manners than are displayed at the present time if ward clerks, dressers and housemen are to maintain the association with the paying patients that they have with the others.

It is, we are inclined to feel, a sad day in our history that we should have come to the point of decimating the beds that hitherto we proudly held at the disposal of those sick persons who so often are as wanting in money as they are in good health. And all we are told for some five thousand pounds a year, which it is estimated that this system will bring to the Hospital. We believe that the introduction is not regarded with favour by any of those closely associated with Guy's, but has been introduced as an experiment at the suggestion of the King Edward's Fund, which now exerts so powerful an influence in the direction of the finances of the voluntary hospitals.

Will it work? It is difficult to see that we can really gain. It is hard to believe that people with the specific incomes will be able to afford the five guineas; and if they do pay it, so large a proportion is it that it is not difficult to understand them if they tend to object to repeated and extensive "clinical demonstrations."

THE Residents' Play this year will take place from Monday, February 6th, to Friday, February 10th, inclusive. As the available number of seats is always much too small to meet all demands, early application in writing to the President of the Residents is advised. Applications should arrive not later than Friday, January 27th.

DR. O. G. J. HERXHEIMER, late Professor of Internal Medicine and Physiology of Sport, University of Berlin, will give three Lectures during the present term in the Anatomical Theatre, on Thursdays at 4.15 p.m., commencing on Thursday, January 26th.

The subjects of the Lectures will be as follows:
(1) Medical Examination for Physical Fitness.
(2) The Metabolic changes in Muscular Exercise.
(3) Practical Hints for efficiency in Physical Training.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.
(*continued*)

After lunch Harris took me to the Sanatorium, where he does the surgical tubercle. The surgical block is a magnificent building, and the theatre huge. It is lit by the Holophane system that I saw at Mount Sinai, New York. The lights are all in the roof: sixty panes in the central panel, twelve in each end panel, arranged in groups of four which are bevelled in concentric lenses, with a powerful light in each, *i.e.*, 27 lights in all, in a separate attic. It gives a very good diffuse light, but, of course, is not adjustable, and must be expensive where light bills matter. There are two galleries (apparently used by nurses) completely shut off by plate glass. In each is a loud-speaker, and the operator wears a little flat microphone, about 1 inch by 2 inches by quarter inch, strapped to his neck near the larynx. All he says, including "tick off" to the assistant, is relayed to the gallery.

Case was arthrodesis of hip. Young adult; spine fused three years ago. Well till a few months ago, when he developed left hip limp. X-rays shows destruction of joint space with irregular absorption and (?) a few small sequestra of weight-bearing part of head. Would have given spinal but for bone graft; therefore uses cyclopropane.

Incision, long Smith Peterson, giving six or seven inches below great trochanter. Works

right down to bone between rectus and gluteus minimus. Detaches reflected (and apparently

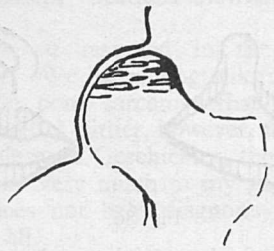


Fig. 82.

straight) head of rectus with chisel, and levers this origin inwards till his lever is resting on inner surface of ileum under iliacus, and anterior border of bone is exposed. He clears head and neck in front and above by cutting away capsule. Then

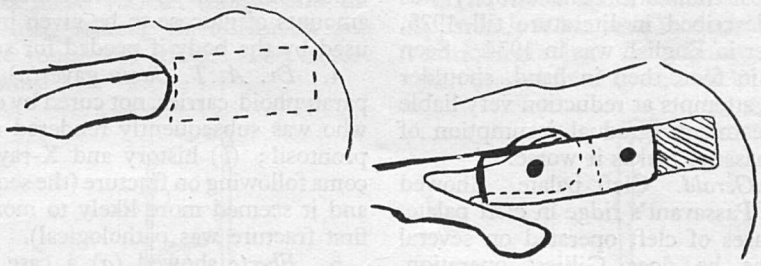


Fig. 83.

working very carefully and skilfully with four or five osteotomes he cuts out an enormous slab, about 2 by 4 inches and $\frac{1}{4}$ to $\frac{1}{2}$ inch thick from outer surface of ileum, extending from iliac crest to roof of acetabulum. He then splits head and neck along their middle with osteotome, levers out the upper half hinging on base of trochanter, and puts in this doorstep graft. He fixes it by two large beef-bone screws, to the raw surface over ileum, and to that on neck of femur, allows the upper half of neck to drop back, and sews up carefully, interrupted catgut for muscles, and silk for skin.

He puts the boy in a plaster spica from nipples to knee, lined with Dunlopillo.

This seems a fine fusion, with the criticism that it passes through diseased areas. He showed me a specimen, where the patient had died three years later from tuberculous kidney, that was a magnificent block of bone.

Dunlopillo seems a fine lining. It costs the same as felt, is so porous that it does not provoke sweat, and does not wrinkle or attract fleas. They use half-inch (nominal more like five-eights to three-quarters). They do not sew or stick, but lap it over, and hold with towel clips till it is fixed by the plaster.

I had tea at the hospital, back to Graham's to pack, then to dinner at the club with most of the surgeons, and, after dinner, a weekly staff meeting, to which, in my honour, the staff of all the other hospitals had been invited. The case was a post-mortem on a duodenal hæmorrhage. The man had the most enormous posterior duodenal ulcer I have ever seen, about 1 by $1\frac{3}{4}$ inches, with the gastro-duodenal open in the base. Shenstone had done a gastrectomy; after forty-eight hours he had another hæmorrhage and died.

Gallie called on the younger men to discuss the case, and it was remarkable how ably they did so. There were suggestions for directly dealing with the artery—Graham's to cut all round, close duodenum distal to it, and draw it in on the ulcer base, possibly a fine operation for a smaller ulcer, but N.B.G. for this one. Others suggested opening the duodenum and putting a purse string round the hole. As Shenstone said, the man did not bleed for forty-eight hours—would a purse string in scar tissue have held as long? I was asked to sum up, and did my best, but felt it was not up to the standard of the younger men.

Went direct to the night train for Montreal.

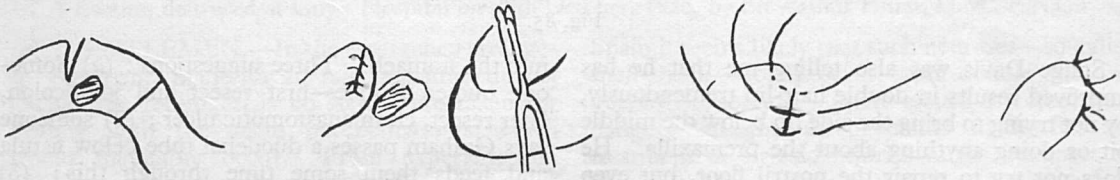


Fig. 84.

Friday, November 5th

Woke up coming into Montreal, through not very exciting agricultural country. The only thing that struck me was a house that had done the maisonette business thoroughly. A curved iron staircase sprung from the garden and swept in a wide curve in front of the ground floor, to enter at a first-floor window that had been made into a front door.

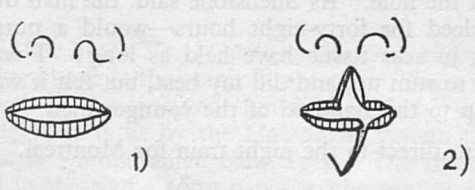
Went to the Ritz, and at breakfast recognised Masson of the Mayo Clinic, so I got the right party—the Inter-Urban Surgical Society.

The morning meeting was in the Surgical Amphitheatre of the Montreal General Hospital, and consisted, as indeed did the whole meeting, of short papers. List of these is attached.

1. *Gurd*, whom I met in Chicago, spoke on bone atrophy and has given me a reprint of his paper. Acute post-traumatic bone atrophy was apparently not described in literature till 1925, and the first paper in English was in 1934. Seen most commonly in foot, then in hand, shoulder third. Repeated attempts at reduction very liable to cause it. Treatment—gradual resumption of use; too early massage makes it worse.

2. *R. R. FitzGerald.* Cleft palate. Showed excellent films of Passavant's ridge in cleft palate. Discussed late cases of cleft operated on several times. For these he does Gillies' operation, detaching, pushing back, and skin-grafting the soft palate, and fitting an obturator. Two cases he showed spoke excellently. When they talked the soft palate rose above the level of the obturator, but this was tall, so that the palate slid up it and there was no leak.

One, a boy, also had a dreadful short tight lip and flat nose. These had been beautifully repaired. The tip of the nose was brought out by a cartilage graft. The lip was widened and deepened by a pedicle graft from the lower lip, explained to me later by Staige Davis.



Staige Davis was also telling me that he has improved results in double hair-lip tremendously, by not trying to bring the side lip below the middle bit or doing anything about the premaxilla. He does not try to repair the nostril floor, but even that he may leave till later. This leaves an ugly lip, short with two red points. But the columella grows in length and breadth, the premaxilla

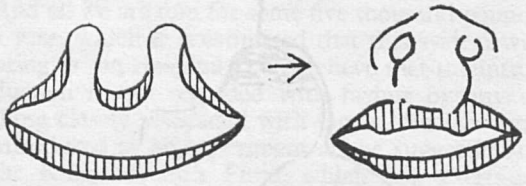


Fig. 86.

recedes, and a far better job can be made a year later than is possible when people try to do too much at first.

5. *Dr. I. M. Rabinowitch* gave us a good talk on protamin zinc insulin in surgical cases with diabetes. Thing seems to be that action is more slow and prolonged, does not involve frequent blood estimation and disturbance, and allows large amounts of glucose to be given intravenously and used by the body if needed for surgical work.

4. *Dr. A. T. Bazin* gave (*a*) an account of a paratyphoid carrier, not cured by cholecystectomy, who was subsequently rendered non-infective by prontosil; (*b*) history and X-ray of case of sarcoma following on fracture (the sequence was short, and it seemed more likely to most of us that the first fracture was pathological).

5. *Eberts* showed (*a*) a case of anæmia and diarrhœa following resection of ascending colon and five feet of ileum for (I believe) sarcoma—I was getting very sleepy and only remember that it turned out to be some deficiency due to large loss of bowel, and they were getting her right; (*b*) two cases of chronic intususception in adults, treated by resection. In each the appendix was about the apex, and seemed as if it might have started the trouble. In one it was a large hæmatocele; (*c*) case of gastro-colic fistula for discussion. The history was a long one, and barium meal never entered the colon, only an enema going

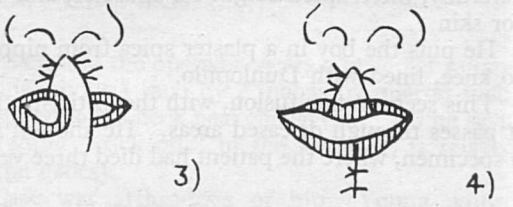


Fig. 85.

into the stomach. Three suggestions: (*a*) Someone quoted Wilkie—first resect and join colon, later resect, clean anastomotic ulcer; (2) someone says Graham passes a duodenal tube below fistula and feeds them some time through this; (3) Damon Pfeiffer said he did a proximal double-

barreled colostomy first and later operated. This is a fine idea ; the other two are a bit theoretical.

(*d*) Endometrioma of abdominal wall following hernia operation. Sections showed typical endometrium.

At 11.30 we resumed in the Pathological Department. We had a long talk from Rhea and Pritchard on bone sarcomas that left me even more puzzled. I gather, however, that they agree on the whole with Geschickter, though they still could not say very much to my grouse that this grouping does not help diagnosis, prognosis or teaching at all.

Lunch in Nurses' Home, then to neurological Institute. The Neurological Institute is a beautifully built and equipped place, presumably a gift of someone. The hall is a delightful example of applied art. The roof is a section of cerebellar cortex, done huge and stained Golgi. The table is a cross-section of brain in veneered wood. Emblems around mean various things, and the names of great men—among them Horsley and Sherrington—are round the frieze. The lecture hall is the last word.

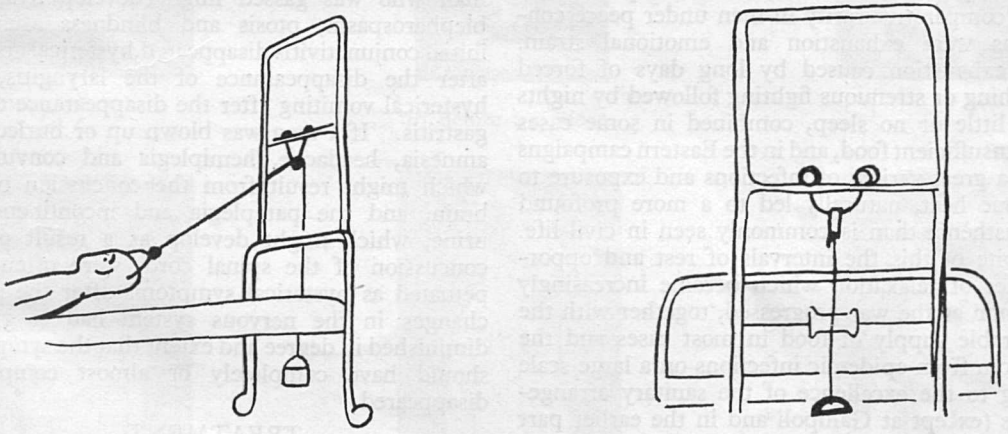


Fig. 87.

The first talk was by Dr. Turner on the treatment of fractures and dislocation of the cervical spine by traction and fusion. Traction was done by two methods : drill holes in each parietal with wire loops passed through, and ice-tong callipers pulling on small burr holes in the parietals. The second seemed to me far safer. Traction was over a pulley at the head of the bed, so arranged that it allowed some lateral movement of the head and that the angle of pull could be altered, once disengagement had been secured, to get replacement. After reduction, the apparatus allows patient to turn over on his side to sleep. After reduction they fix them (? all or ? only those that tend to recur) by bone grafts. They use a double graft, laid each side of the cervical spines, and wired to each other through holes in the spinous processes with silver wire. Grafts taken from iliac crests or ribs. If high, then fix top end to occiput, wiring it to a roughened area. Plenty of X-rays of cases ; looked good. Several were completely paralysed ; some recovered complete movement, some nearly complete.

D. L. Reeves spoke of the dangers of thorotrast. Apparently it has been recommended and used for ventriculography. In animals, at any rate, it is taken up and fixed by endothelial cells of meninges and leads to hydrocephalus. In addition, there is continued damage by the bombardment of particles.

The last two papers were purely neurological.

Shell Shock

A Lecture delivered at Guy's Hospital on 28th October, 1938, by Sir Arthur Hurst, D.M., F.R.C.P.

GENTLEMEN,—In the emergency arrangements made for air-raid casualties during the recent crisis no steps were taken for dealing with the acute psychoneuroses which would inevitably occur. From experience in Spain it seems likely that such neuroses—so-called shell-shock—would occur with double the frequency of wounds. There would therefore be a danger that the arrangements made for the treatment of air-raid injuries might be upset by

the presence of numerous men, women and children suffering from shell-shock. Experience in modern methods of treating psychoneuroses would be of little value in dealing with these cases, which require vigorous and even brutal treatment to produce the immediate results which would be essential in order to maintain order and to keep the morale of the civil population at a high level.

The hysterical manifestations following air-raids would probably be similar in all respects to those which occurred among soldiers during the war. After my return from Salonica in July, 1916, until July, 1919, my whole time was occupied in dealing with war neuroses, and during the last year and a half I was in command of the Seale Hayne Hospital, near Newton Abbot, where with a staff of ten medical officers over three hundred cases were continuously under treatment.

THE CAUSES AND NATURE OF THE WAR NEUROSES

The two conditions which led to the great frequency of neuroses in soldiers compared with their comparative rarity in men under peace conditions were exhaustion and emotional strain. The exhaustion caused by long days of forced marching or strenuous fighting followed by nights with little or no sleep, combined in some cases with insufficient food, and in the Eastern campaigns with a great variety of infections and exposure to extreme heat, naturally led to a more profound neurasthenia than is commonly seen in civil life. In spite of this the intervals of rest and opportunities of relaxation which became increasingly common as the war progressed, together with the admirable supply of food in most cases and the freedom from epidemic infections on a large scale owing to the excellence of the sanitary arrangements (except at Gallipoli and in the earlier part of the Mesopotamian campaign), prevented it from being as widespread or as severe as might have been expected. More important than the actual production of neurasthenia by exhaustion was the increased liability to the development of hysteria and anxiety neuroses.

A few fortunate individuals are born with a temperament which does not allow them to know what fear means. The vast majority of men, however, including many of the bravest, were terrified when first exposed to the terrors of a bombardment. The majority became accustomed to it in time, but sooner or later the exhaustion of active service resulted in a gradual failure of this adaptation, so that not only the constitutionally timid—the martial misfits—but some of those who for months or even years had faced the life cheerfully and even with enjoyment ultimately broke down from the long-continued nervous strain.

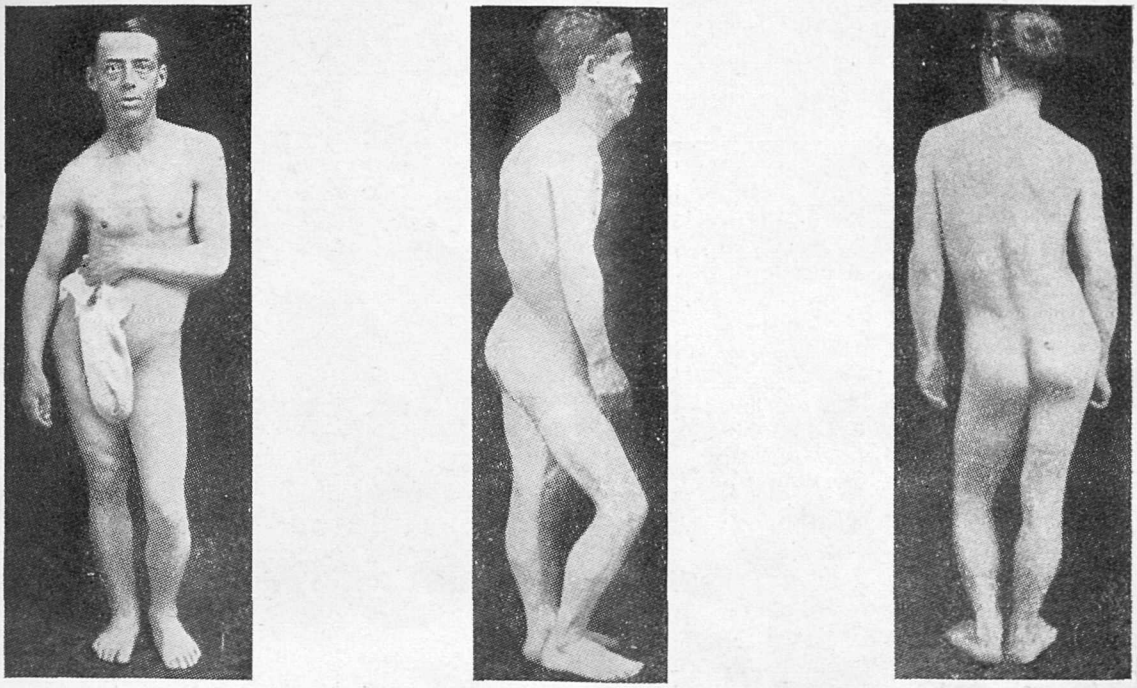
The emotion of fear acted in three ways. In the martial misfit, who is by nature very suggestible, it gave rise at once to severe physical symptoms, which often became perpetuated as hysterical tremor, mutism and paraplegia. In other cases it gradually led to the development of anxiety neuroses. Finally it might result in such a disturbance of the suprarenal and thyroid glands that functional hyperadrenalism-hyperthyroidism resulted.

Apart from the fear caused by a prolonged bombardment, the more acute emotion following a single exceptionally terrifying experience produced such a change in the individual's nervous system that he became for a short time extremely liable to develop hysterical symptoms by suggestion. This was particularly true if the experience led to actual physical results; however evanescent these might be, they were likely to be unconsciously perpetuated and even exaggerated by the patient under such conditions. Thus a man who was gassed might develop hysterical blepharospasm, ptosis and blindness after the initial conjunctivitis disappeared, hysterical aphonia after the disappearance of the laryngitis, and hysterical vomiting after the disappearance of the gastritis. If a man was blown up or buried, the amnesia, headache, hemiplegia and convulsions which might result from the concussion of the brain, and the paraplegia and incontinence of urine, which might develop as a result of the concussion of the spinal cord, were often perpetuated as hysterical symptoms after the actual changes in the nervous system had so greatly diminished in degree and extent that the symptoms should have completely or almost completely disappeared.

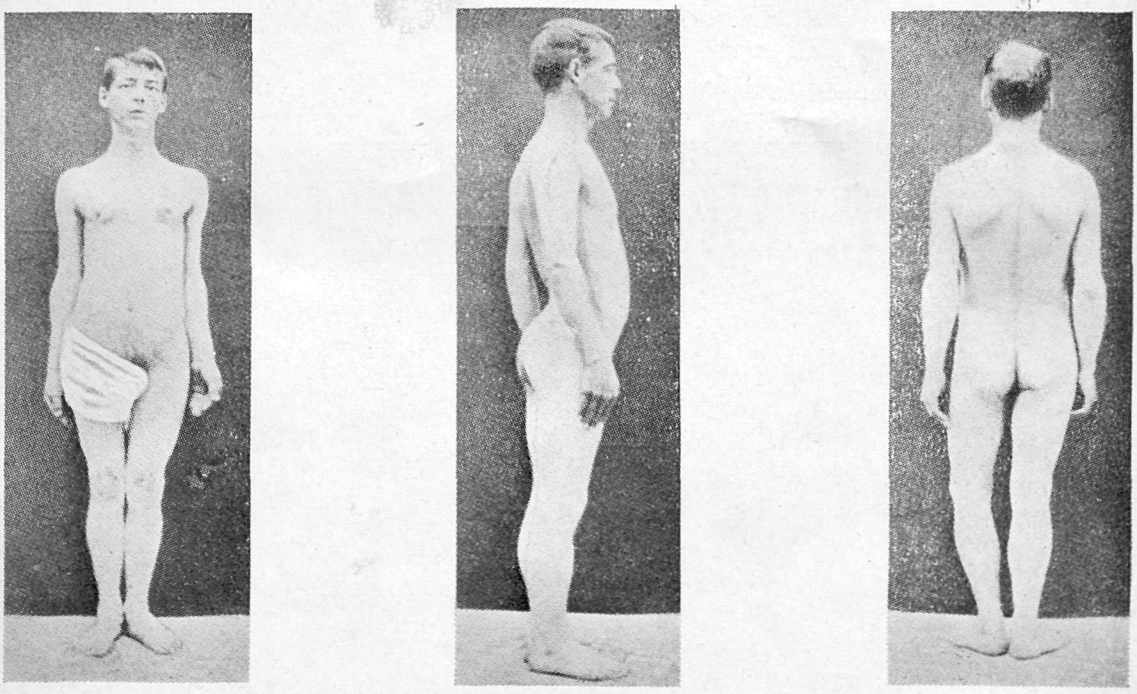
TREATMENT

We gradually developed methods of treatment, which may have been lacking in psychological subtlety, but were eminently successful in practice. Each of the Seale Hayne medical officers, only one of whom had any special knowledge of psychology, was eventually able to cure almost every case of hysterical paralysis and contractures, tremors, blindness, deafness, aphonia and mutism at a single sitting, varying in duration from a few minutes to a couple of hours or more, even if the symptoms had been present for many months. So long as the patients were not sent back to the front but were kept on home service or returned to civil life there were no relapses. It would clearly be desirable that these medical officers and the numerous others who learnt to apply similar

Fig. 1.



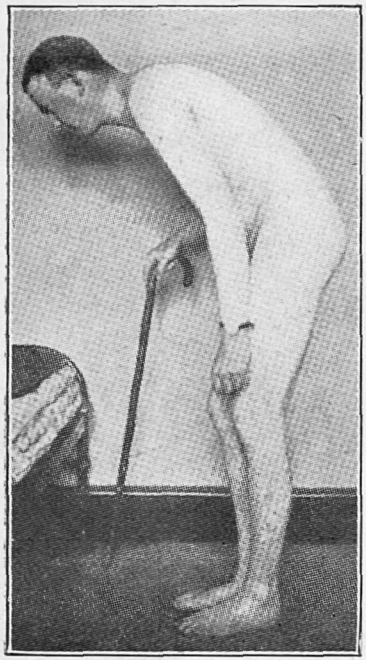
(*a*) Before treatment.



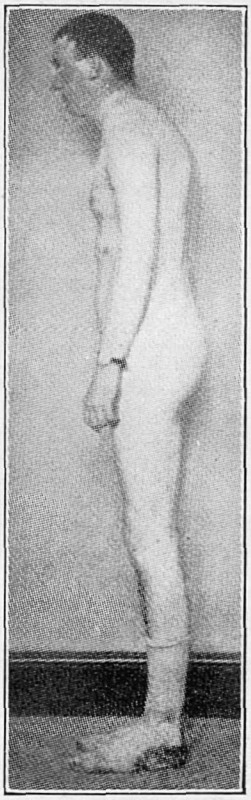
(*b*) After treatment.

A case of hysterical spinal curvature cured by an hour and a half's re-education.

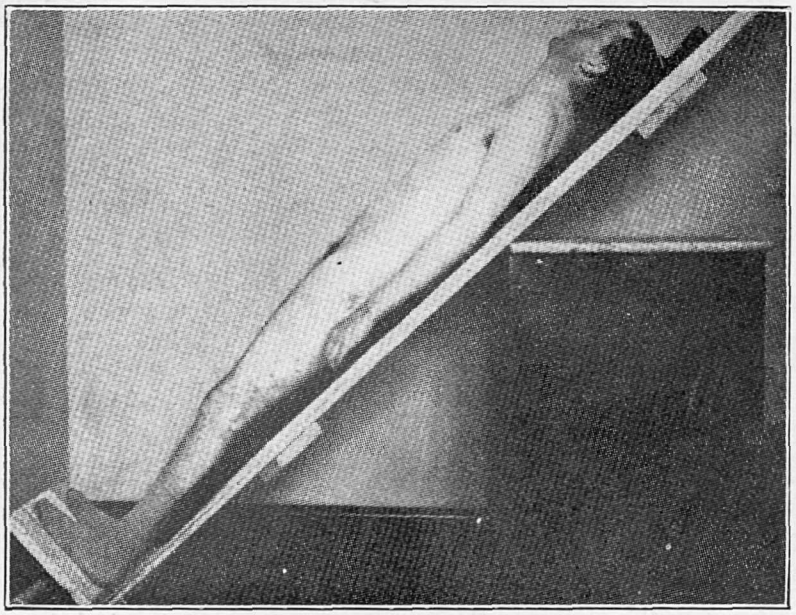
Fig. 2.



(*a*)
Before treatment.



(*c*)
After treatment.



(*b*) During treatment.
Bent back of six months' duration cured by "back-board method" in ten minutes.

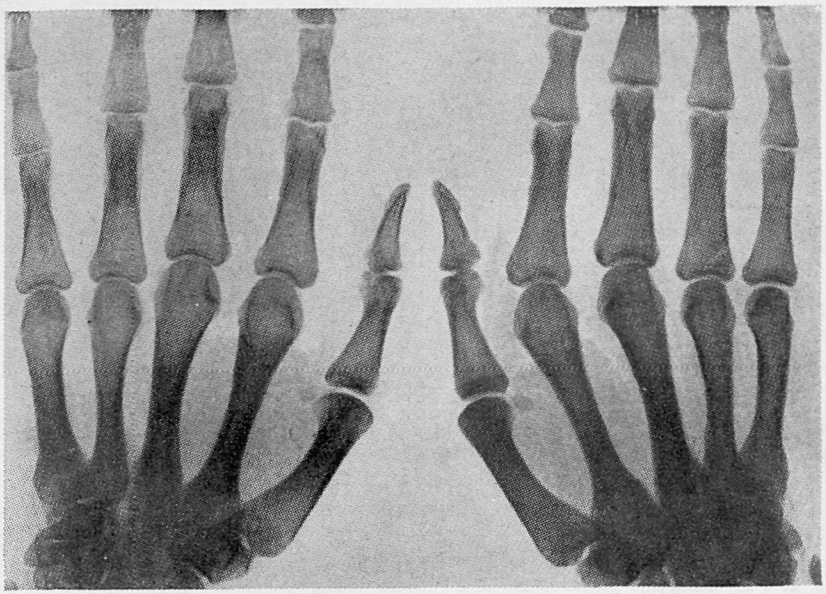


Fig. 3. Skiagram of right and left hands, showing increased transparency of the bones of the left hand, taken immediately after recovery from hysterical paralysis of sixteen months' duration.

Fig. 4.

Hysterical ptosis of left eye and paralysis of left side of face with hysterical spasm of right side of face.

(*a*)

Position at rest, showing double ptosis, right-sided facial spasm and left-sided facial paralysis.

(*b*)

Same as (*a*), with left eyelid raised so as to see. This could not be done with right eye owing to spasm.

(*c*)

Voluntary effort to open eyes, resulting in over-action of left frontalis, though left side of face is paralysed, and spasm of right side of face including platysma.

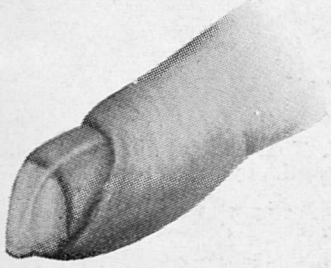


Fig. 5.

Improved nutrition of nail, drawn six weeks after sudden recovery with psychotherapy from hysterical paralysis, which had lasted for over a year.

Fig. 6.

Atrophy of index finger of left hand, compared with normal finger of right hand, resulting from hysterical contracture of fingers of eighteen months' duration. Drawn after recovery from contracture.

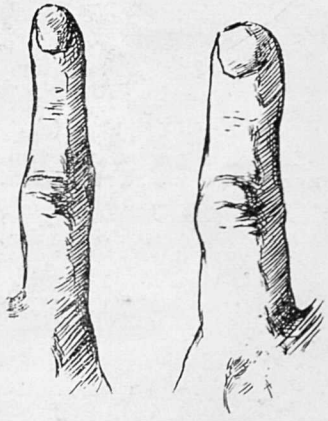


Fig. 7.

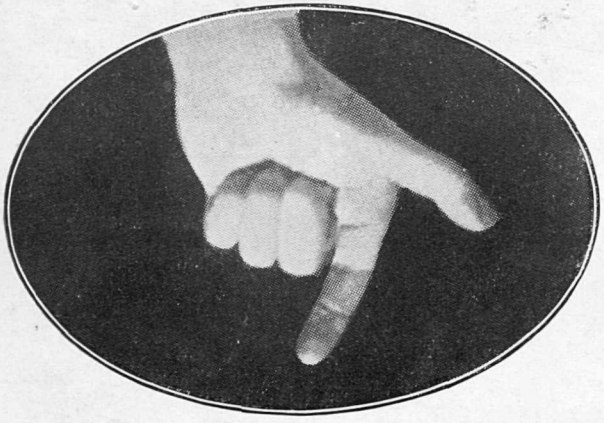
(*a*)

Hysterical contracture of toes associated with hammer-toe.

(*b*)

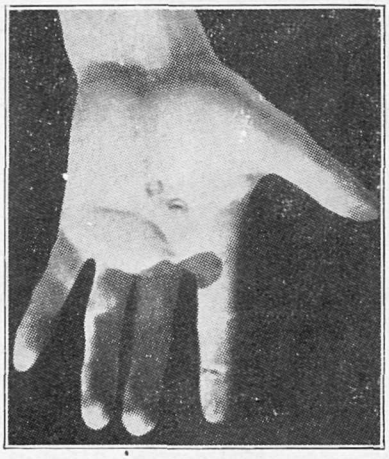
Same case cured after half an hour's psychotherapy.

Fig. 8.



(*a*)

Hysterical contracture of hand persisting thirty-five months after wound near elbow.



(*b*)

Same hand after half an hour's treatment. Notice depressions formed in palm by pressure of nails.

methods during the war and are now scattered throughout the country, for the most part in general practice, should be employed in the event of another war in applying their methods and teaching them to recently qualified men and senior students, who would quickly learn to cure the " shell-shock " following air-raids so promptly that they could be sent straight back to their homes if evacuation into the country were impossible.

With our earlier cases we employed various accessory methods, such as suggestion under hypnosis or partial anæsthesia and with the aid of faradism, but gradually discarded them all. We finally used no other methods than simple explanation followed by persuasion and re-education. The success of this treatment led to the establishment of a remarkable " atmosphere of cure " in the Hospital, so that patients on arrival were told by those who had already been cured of their experience and so came to treatment convinced that they, too, would recover after a single interview with their medical officer, an expectation which rarely failed to be realised.

This simple method of rapid psychotherapy is, of course, applicable only to gross hysterical symptoms. The anxiety neuroses and cases of hyperthyroid-hyperadrenalism required much more prolonged treatment similar in nature to the methods in common use at the present time.

HYSTERICAL SYMPTOMS FOLLOWING THE EMOTION OF FEAR

Extreme terror gives rise to certain familiar symptoms. The individual becomes shaky, " paralysed with fear," and unable to speak, " his tongue cleaves to the roof of his mouth." Under ordinary conditions the cause of fear is momentary and the physical results disappear in a few seconds. But during a heavy bombardment a man often remains terrified for hours. If the tremor, inability to move the legs, and speechlessness persist all this time it is natural that these physical expressions of fear should make such an impression on his mind that when the original emotion has disappeared the tremor, paraplegia and mutism persist as hysterical symptoms.

In the first two years of the war cases of this kind were given the unfortunate name of " shell-shock," in the belief that they were organic in origin and due to the actual concussion caused by the explosion of powerful shells. Consequently no attempt was made to cure them by psychotherapy, and the treatment by rest and sympathy helped to perpetuate them. This unsatisfactory result was increased by the use of the word " shell-shock," which gave the patient the idea that he was suffering from some new and terrible disease. When at last the true nature of the condition was recognised, it was found not only that psychotherapy resulted in the immediate disappearance of the symptoms when they were treated in the special casualty clearing station* opened for the purpose by the British and French, but that cases of two, three and even four years' standing were also frequently cured at a single sitting in hospitals in England. Although this form of hysteria was most common in neurotic individuals, a large proportion of the patients treated within the first forty-eight hours recovered so completely that they were able to return to the firing line and showed no tendency to relapse. Very few of the patients whose condition had persisted for many months before coming under treatment could return to France, but such men were always able to go back to their former civil occupation and often had no underlying mental condition requiring further treatment, although in some cases the hysteria was associated with anxiety symptoms. Indeed, many patients at once lost such symptoms as headache, depression, insomnia and nightmares, which had troubled them for months or even years, directly the obvious physical symptoms, such as mutism or stammering, tremor and paraplegia, were removed by explanation, persuasion and re-education.

For a long time it was thought that the tremor in shell-shock differed from the other symptoms in being an organic condition, no less an authority than Oppenheim having come to this conclusion when he found that he was unable to relieve it in German soldiers by psychotherapy. We noticed, however, that it was always associated with rigidity, as it is in paralysis agitans. We therefore taught the patient to relax; when this was accomplished the tremor was easily arrested, and during the last year of the war we found that tremor was as easily cured as any other hysterical symptom. I was recently able to demonstrate this in a woman admitted into Mary for some other condition; she also had an hysterical tremor of her right hand. At a " combined round " I persuaded her to relax the muscles of her arm and then " smoothed away " the tremor, the whole process occupying not more than a couple of minutes.

HYSTERICAL SYMPTOMS FOLLOWING SPINAL CONCUSSION

Paraplegia was a very common sequel of spinal concussion following burial by a collapsing trench.

* The first of these was under the command of Major W. Johnson, M.C., formerly Chief Clinical Assistant in the Neurological Department at Guy's and now of Liverpool.

When dug out a man might be completely paraplegic, and if examined within the next twenty-four hours his plantar reflexes were generally found to be extensor, his knee jerks in some cases exaggerated and accompanied by ankle clonus and in others lost. In the few cases in which a lumbar puncture was performed evidence of hæmorrhage was found, but by the end of a week the cerebrospinal fluid was normal. The patient was quite properly kept strictly at rest, and after a varying period reached a hospital in England. There his condition was regarded as organic, whether the abnormal physical signs had persisted or not. He was consequently kept in bed and no attempt was made to get him to move his legs. Sometimes spontaneous improvement occurred, but when he began to walk he was found to have developed a more or less fantastic gait. We rarely saw such cases until six months or more had elapsed since their injury. By that time the paraplegia was purely hysterical, although in a few cases an extensor plantar reflex persisted owing to the presence of a small residual organic lesion. In the early days we quickly taught the patient to walk at once, but found it necessary to continue treatment for another month or more in order to cure the hysterical gait which developed. Later on we found that if the first treatment was carried on for sufficiently long in spite of the exhaustion of both patient and medical officer, at the end of two, three or more hours the patient was walking normally. Occasionally some disorder of micturition which had accompanied the original organic paraplegia persisted like the paraplegia as an hysterical symptom; this invariably disappeared with the cure of the paraplegia.

HYSTERICAL DEAFNESS*

In order to hear, it is necessary to listen, listening being as active a process as moving. Perhaps the dendrites of the nerve cells are thrown out at each cell station in the auditory tract when an individual listens and are withdrawn when he is inattentive. If a man has become temporarily deaf owing to a loud explosion or continuous gun-fire, he may become so convinced that he will never hear again that he ceases to listen. This is the origin of hysterical deafness. It is a true nerve deafness, though functional; the patient's voice alters like that of a man with organic deafness, he may spontaneously learn lip-reading, and in severe cases the auditory-motor reflex, in which the pupils dilate and the eyelids blink in response to loud noises, may disappear owing to the blocking produced at the lower as well as the higher auditory centres by the withdrawal of the dendrites when inattention is extreme. Hysterical deafness persists during sleep. We put some deaf patients in a tent by themselves. In the middle of the night we entered the tent shouting "Fire!" and then banged a coal-scuttle with a hammer within a few inches of their heads, but were unable to wake them and there was not even a flicker of their eye-lids. These men were subsequently cured by psychotherapy, and at their own request were sent back to their units at the front.

The only signs of organic deafness of any value are those which show the presence of vestibular disorder, as this never occurs in hysteria, whereas an organic lesion which is sufficiently severe to cause complete deafness almost always involves the vestibule as well as the cochlea. All cases of concussion deafness, even if the drums are ruptured, are at any rate partly hysterical, and recovery occurs as soon as the patient is taught to listen once more, the auditory-motor reflexes reappearing at the same time.

HYSTERICAL SYMPTOMS WHICH FOLLOWED GASSING

An important group of hysterical symptoms in soldiers resulted from gassing. The irritation of the eyes, throat and stomach caused conjunctivitis, laryngitis and gastritis, the last being due to the swallowing of saliva in which the gas was dissolved. The pain caused by the conjunctivitis induced the patient to refrain from opening his eyes with his levator palpebræ superioris. If, however, he tried to open them, his attempt was frustrated by a reflex protective spasm of his orbicularis palpebrarum. Under ordinary conditions the conjunctivitis had improved sufficiently at the end of three weeks for the eyes to be opened without difficulty, but if the patient was led to fear for his vision on account of previous weakness of the eyes or too prolonged treatment with local applications, bandages, dark spectacles or eye-shades, the voluntary inhibition of the levator might be perpetuated as hysterical ptosis and the reflex spasm of the orbicularis as hysterical blepharospasm. As the uneducated layman associates the idea of blindness with inability to open the eyes, many of these patients thought they were blind. Consequently, when they were taught to open their eyes they found that they could see only indistinctly, as they had hysterical paralysis of accommodation. Less frequently they could not see at all, as they had become so convinced that they were blind that they had ceased to look at all and, not looking, they could not see. Simple explanation followed by re-education in looking

**Vide* also my Croonian Lectures on "The Psychology of the Special Senses."

always resulted in permanent recovery. Dr. D. Ellis,* when my house physician in 1929, cured a man with hysterical blindness of eighteen months' duration in the course of a single night. In this case, as in one cured at Seale Hayne Hospital after four years of blindness, the loss of vision was so profound that the light reflex was completely absent, but returned immediately on the restoration of vision. In these cases, which are analogous with those of severe hysterical deafness with loss of the blink reflex already referred to, the complete "inattention" was apparently associated with such an increase in the resistance at the synapses in the nerve tracts from the retinæ to the cerebral cortex by some such process as withdrawal of dendrites that the light reflex was lost and returned only with a return of attention and diminished resistance at the synapses.

The whispering which accompanied the laryngitis produced by gassing was originally in part a voluntary precaution to avoid pain and in part the result of a protective reflex. It was frequently perpetuated as hysterical aphonia, especially if a laryngoscopic examination had revealed the presence of some abnormal congestion, which led to intralaryngeal medication, as the diagnosis and treatment suggested to the patient that his voice might be permanently lost. When he was taken away from his unfavourable surroundings and treated by explanation, persuasion and re-education without any recourse to suggestion by electricity, anæsthetics or other means, he invariably recovered. Each one of a series of a hundred patients treated at the Seale Hayne Hospital was cured at a single sitting, although the average duration of the aphonia before admission was two hundred and five days. About one-third of these cases were not caused by gassing, but by ordinary laryngitis, or they followed mutism, which had disappeared either spontaneously or after treatment which had been discontinued too soon. The 101st case was recognised to be organic by the timbre of the voice, a view which was confirmed when one cord was found to be paralysed and an aneurysm of the aorta was discovered.

The gastritis caused by gassing resulted in vomiting—a protective reflex which fulfilled its object by removing the irritant from the stomach. The actual gastritis rapidly disappeared, and whenever the vomiting persisted for more than three or four weeks it proved to be hysterical. A very large number of soldiers were invalided from the service for so-called gastritis, the only symptom of which was vomiting. We found that cases of this sort could be cured by a single treatment, if this was continued until the patient was quite convinced that he was no longer suffering from gastritis and that he could eat anything without fear of vomiting, even if he had vomited after every meal for many months and had been kept on a strictly fluid diet.

HYSTERICAL SYMPTOMS FOLLOWING TRIVIAL WOUNDS OF LIMBS

The most common of the hysterical conditions in soldiers were the paralyses and contractures which followed comparatively trivial wounds of the limbs. In many cases the paralysis and contracture were associated with marked vaso-motor disturbances, including cyanosis or pallor, a pulse of small amplitude, œdema and trophic changes in the skin, nails and bones (see figs. 3, 5 and 6). Babinski, having experienced considerable difficulty in producing any improvement in the paralysis and contracture by psychotherapy, and impressed by the fact that the associated vasomotor and trophic conditions could not possibly be hysterical, concluded that the paralysis and contracture were also not hysterical. He revived the old theory of reflex nervous disorders, with which Charcot had sought to explain the muscular atrophy and spasm that often accompany diseases of joints. He wrote a book on the subject, which was translated into English. Coming from the greatest living authority on hysteria, it had the unfortunate effect of delaying by many months the recognition of the hysterical nature of these conditions and the possibility of curing them rapidly by simple psychotherapy.

Our experience gradually led us to conclude that there was no foundation for Babinski's theory. The immobility and spasm might arise as a voluntary or reflex response to pain, or they might be due to localised tetanus, or to the application of splints or bandages. The abnormal posture and the immobility and spasm were perpetuated by auto-suggestion after the primary cause had disappeared, and to this was very often added the hetero-suggestion involved in treatment by electricity and massage. The hysterical paralysis and contracture which resulted could invariably have been prevented by persuasion and re-education directly the condition of the wound made active movement permissible.

The hysterical nature of the paralysis and contracture was proved by their rapid cure with psychotherapy (see figs. 1 and 2). In one series of 100 consecutive cases treated at Seale Hayne Hospital, ninety were cured at a single sitting of an average duration of fifty-four minutes, and the remainder were cured within a few days. Major J. F. Venables, in April, 1919, cured a man with a completely useless hand, dating from a wound

* *Guy's Hosp. Rep.*, 1930, lxxx, 26.

received in October, 1914, in just under five minutes.

Disuse of a limb, whether caused by organic disease or hysteria, leads to deficient circulation. This by itself was enough to explain the cold, blue, and sometimes œdematous extremities, which were most severe in cold weather and in individuals who had always had a feeble peripheral circulation. They disappeared temporarily by artificially increasing the circulation by the application of heat, and permanently, as we repeatedly observed, by restoring the power of movement and by means of psychotherapy.

Deficient circulation gave rise in turn to deficient nutrition, so that the skin and subcutaneous tissues became atrophied, the bones decalcified as shown by the X-rays, and the nails thin and brittle (see figs. 3 and 5). In one case, in which some trophic changes had developed as a result of hysterical paralysis and contracture of over a year's duration, and in which the power of movement was restored at a single sitting, the nails subsequently showed a definite horizontal line separating the opaque, vertically ridged, thin and brittle part which grew during the period of disuse, from the pink, smooth and otherwise normal part, which began to grow immediately recovery took place (see fig. 5).

In the same way the rigidity of the finger joints, observed both in cases of organic nerve injury and hysterical paralysis and contracture, which persists under deep anæsthesia, has always been regarded as due to adhesions or fibrous contractures, which only give way under forcible manipulation with sounds of tearing and resulting effusion. This condition is really the result of some reversible physico-chemical change in the fibrous tissue caused by deficient circulation. A slight increase of mobility of such joints follows the application of warmth, which improves the circulation, and we found that complete and immediate restoration of mobility followed the return of the natural circulation as a result of the rapid cure of the paralysis and contracture.

HYSTERICAL CONTRACTURES FOLLOWING RHEUMATISM

Some time in 1918 I was asked to visit a hospital at a well-known spa which had been taken over for the use of "rheumatic" soldiers. I found numerous patients who had been receiving physiotherapy of various kinds for many months, whose disability proved to be due to the hysterical perpetuation of a posture assumed as a result of severe fibrositis following long-continued exposure to cold and damp. In other cases a hip, knee or other joint was rigidly fixed as a result of a similar hysterical perpetuation of a synovitis caused by a temporary infection or minor injury. Captain J. W. Moore, an American physician attached to our Hospital, who had come with me, cured a man with two rigid knees whilst I was seeing the other patients. In this case, as in several others, the rigidity had persisted under general anæsthesia and had not unnaturally been regarded as the result of adhesions. When, however, the patient was shown how to relax his muscles, free mobility returned to the joints without any sound of snapping or tearing of adhesions. It remains a mystery why relaxation of the muscles did not occur under anæsthesia.

Fig. 2 (*a*), (*b*) and (*c*), are photographs taken of one of our many cases of soldiers who stood and walked in the position of a "man with a muck rake." He was the only case of the kind in which rapid recovery did not follow the usual treatment. As he could lie flat in bed the apparatus shown was made for him. When it was slowly raised from the horizontal to the perpendicular he remained leaning against it, and finally walked off with his back straight—cured in sixty seconds after ten months of slow and painful progression with a rigid bent back.

Correspondence

Peace!

To the Editor of the GAZETTE

SIR,—Everyone will agree with certain points made by Mr. Layton in his Presidential Address to the Debating Society. As Mr. Layton observes, it is absurd, when we think of the millions we spend on armaments, yet when we want a few thousands for the health of the nation we are told, "We cannot afford them."

With certain other of Mr. Layton's remarks one must, however, disagree.

His statement that there is no such thing as armaments for defence is misleading.

The view held by many of us is that a well-armed country is much less open to attack than a weak one, and it is far less likely that Germany will provoke trouble with England if she knows that England is well able to take care of herself. Indeed, it has been admitted by both German and English statesmen that had Germany known that we were going to the support of France in the last war, she would not have marched. Although Serbia had given way to almost all the demands of

Austria and although Germany was in a position to prevent that world flare-up, she did nothing, and admits that the one thing that would have made her act otherwise would have been the definite knowledge that England would assist France. In other words, if the defence seemed likely to be too strong for her.

Again Mr. Layton says: "We want to try to get those who were our enemies to have some faith and confidence in us"; surely the thing that is most needed is that the world should have some faith and confidence in the word of Germany! Most people will agree that this is difficult when one considers the number of times Germany has promised one thing and then, within even a few weeks, broken that promise without the slightest sense of shame.

In speaking of Germany I refer not to the German citizens, the majority of whom, like the citizens of France, Italy, etc., no more want war than we do, but to the handful of rulers who dictate to this nation.

Mr. Layton's statement, "that the opposition in Germany is silent is due to the fact that in political development they are about in the position that we were in the time of the later Stuarts," hardly coincides with the reasons put forward by the Germans themselves. After telling one how they loathe the present regime, they ask, "But what can we do? Spies are everywhere, and the most trivial remark may be taken as disloyal to Herr Hitler and the offender arrested."

The internal affairs of Germany are no business of ours any more than the internal affairs of Guy's are the concern of Bart.'s, but should Guy's start hurling veiled threats at the other hospitals, no one could blame them for sitting up and taking notice. I say, that as in 1914 so now, the peace of the world depends on Germany.

If Germany were to say, "Look here, we are sick of this arms race, let's scrap them and try something else for a change," England would be the first to acclaim her. But Germany will not do this, and thus her cries of "We want nothing but peace" are doubted.

No one can ever say that England did not disarm.

Yours, etc.,

JOHN JAMES.

29, Weymouth Street,
Portland Place, W.1.

The "Journal of Hygiene"

To the Editor of the GAZETTE

SIR,—The Bacteriological Library has recently been buying some back numbers of the *Journal of Hygiene* (Cambridge) in order to complete the series in the Library, which begins at Vol. X.

We have been unable to obtain the following volumes, and we are writing in the hope that some old Guy's man may have back numbers with which he would be willing to part.

The volumes which we still need are as follows: Volumes XII, XV, XXII, XXVI, XXVIII and XXXII.

It must be added that some of these volumes are out of print.

Yours, etc.,

F. A. KNOTT.

Department of Bacteriology,
Guy's Hospital, S.E.1.

Regulations Governing the Admission of Patients to Paying Cubicles in the General Wards of the Hospital

1. A limited number of curtained cubicles are now available in the general wards of the Hospital. The cubicles are comfortably furnished and equipped.

2. The charge for these cubicles has been fixed at £5 5*s*. per week.

3. This charge *does not cover* the maintenance cost to the Hospital of these cubicles, but it is all that the patient is required to pay, and includes the cost of all special investigations.

4. These cubicles are available only for patients whose total incomes do not exceed the following maxima:—

Single persons	£275 per annum.
Married persons	£325 „ „
Married persons with children under 21 years of age	£450 „ „

Patients will be expected to satisfy the Enquiry Officer that their incomes fall within these limits. They will be required to sign a statement to that effect and may be required to produce their notice of income-tax assessment.

5. No fees are payable to the member of the Staff under whom the patient is admitted.

6. All patients in Paying Cubicles may at the discretion of the member of the Staff concented

be the subject of clinical demonstrations for the purpose of the instruction of medical students.

7. In the case of patients dying in the Hospital, an examination may be made to verify the cause of death, and in the interest of progress in the knowledge and treatment of disease. This will not be done if, within twelve hours after death, the relatives or responsible friends notify the Superintendent in writing that they do not wish such an examination to be made.

8. Patients in the Paying Cubicles may receive visitors each evening from 6 p.m. to 7.30 p.m., in addition to the ordinary visiting days of the Hospital, viz., Sundays from 2 to 4 p.m., and Wednesdays from 3 to 4 p.m.

9. In all other respects patients in the Paying Cubicles must conform to the general rules of the Hospital for in-patients.

I ..... having been informed of the foregoing regulations, hereby agree that, if admitted as an in-patient in a Paying Cubicle, I will conform to the said regulations, and furthermore I agree to pay towards the full cost of maintenance the sum of £5 5*s*. 0*d*. each week or appropriate proportion thereof for a part of a week.

Signed .....

Date .....

I ..... being the ..... of ..... on condition of his (her) being accepted as a patient in a Paying Cubicle, hereby agree to accept full responsibility for the above-mentioned fee of £5 5*s*. 0*d*. a week.

Signed .....

Date .....

I ..... declare that my income from all sources does not exceed £ ..... per annum.

Signed .....

Date .....

Hospital Information, etc.

Notice

MEDICAL SCHOOL

Applications are invited for the post of Medical Registrar for the Period ending 30th September, 1939.

Applications should be sent immediately to the Dean, the Medical School Office.

T. J. EVANS,
Dean.

Pass List

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR MEDICAL DEGREES.

For Internal Students.

December, 1938.

J. K. Argo
A. W. Banks
G. A. Brown
N. J. Crane
A. M. Earle
M. M. Figgis
M. D. Keates
P. H. S. Lahaise
B. W. Pett

For External Students.

D. J. Anderson
T. P. Cheevers
W. Fox
G. E. Johns
C. E. Stuart
D. A. Tait
D. J. Tibbs
H. Whitworth

SECOND EXAMINATION IN DENTAL SURGERY.

PART I.

December, 1938.

Pass.

D. G. E. Roberts
G. W. Sawyer
C. Sumsawaste
D. Wright

The following Students are Credited with Anatomy and Physiology.

A. E. Cadman
A. V. Hurst
N. Stark

PART II.

December, 1938.

Pass.

W. E. Jackson
J. W. Lee
*D. L. Rugg-Casey
P. H. Staple
A. Stone

* Awarded a mark of Distinction.

THIRD (B.D.S.) EXAMINATION IN DENTAL SURGERY.

December, 1938.

Pass.

A. G. Beaton.

December, 1938.

M.D.

BRANCH IV.

Midwifery and Diseases of Women.

J. E. Giesen.

Papers by Guy's Men

Bishop, P. M. F., and Others. The œstrogenic properties of "Stilbœstrol" (diethylstilbœstrol). *Lancet*, 1939, i, 5.

Changes of Address

L. J. Godden, L.D.S., 94, Queen's Way, W.2. *Bayswater* 1143.

P. G. C. Jones, M.R.C.S., L.R.C.P., 33, Courtenay Gardens, Upminster, Essex.

Eds. { C.H.E. W.E.Y.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *28th January* 1939 — *Number* 1318

PASSIM

AS a gesture of indifference to the ill-omens of the new year the repainting of the ceiling of the Colonnade is very welcome,especially now that we have been assured through the daily press that we need not wait for the arrival of hostile bombers to destroy the Surgical Block, for it appears that a gale, or even half a gale, will do the job. New paint always imparts a sense of prosperity and enterprise, and with the fresh coats that the Colonnade has received is renewed that feeling of security which of late has fast been disappearing. A return of anxiety has made itself apparent in the form of a gradual revival of an attitude of mind towards international affairs that is not a little reminiscent of the critical days of last year. The increasing remoteness of Munich, not only in time but in international activity, the alarmingly rapid advance of the insurgent forces in Spain, and the Prime Minister's call to National Service make us inclined to expect that it will not be long before we are again swamped with instructions, schemes and plans for the conversion of Guy's to the needs of an emergency of a national nature. Though there has not yet occurred an actual outbreak of hostilities that has directly affected us, we have not, nevertheless, been so far from the firing line in our own country. It is a matter for congratulation that the bomb outrage in Southwark did no more harm to us than awaken a few of the heavier sleepers in the wards. On whether or not it is true that there was some subversive, anarchical influence at work behind the driller who forced his way through the College water supply *en route* for the gas mains, our information does not allow us to give an opinion, but, however incompetent the revolutionary brains of the I.R.A. may be, we cannot believe that they really could have thought that the mere cutting off of the water supply of the College would constitute a convincing act of terrorism. Not infrequently, as it is, some hidden hand turns off the residents' gas fires in their absence. At present, however, there is no great urgency, though it seems probable that we may look forward very soon to being organised and reorganised so that our services may be put in a moment's notice at the State's immediate convenience.

THOSE of us who are especially interested in the relationship of disease with occupation have little opportunity during our general training to study this important and interesting problem at all fully. More often it is only when post-graduate days are reached that we have time or the facilities for learning anything but the elements of industrial diseases, and it is for this reason that we welcome the series of lectures that have been arranged on this subject. The first of this series is to be given by Dr. Donald Hunter, of the London Hospital, whose subject will be " The Toxicology of certain compounds of Lead, Arsenic and Mercury," and will be illustrated by the cinematograph and lantern slides. The date of this lecture is Tuesday, January 31st, at 5 p.m., in the Anatomy Theatre. At a later, though as yet undetermined, date Dr. S. A. Henry, the Home Office Medical Inspector of Factories, will speak on the association of cancer with industry, and is kindly considering a second lecture on accident compensation which will be of direct interest to all of us.

On April 4th Dr. Morgan, of the T.U.C., will give a lecture on the occupational lung diseases. We look forward with interest to hearing these authorities speak on one of the most absorbing and important branches of medicine.

MOST of you will remember our series of articles of a few months ago entitled, " What Do You Think ? " They were deservedly popular, and when they were discontinued we promised that we should give you a similar series in the future. We have kept that promise, for in this issue we

introduce to you the first of a new set of problems by the same author; although rather different in subject matter they are none the less interesting and again offer opportunities for the exercise of your ingenuity. Each one will be the true facts surrounding the occurrence of some tragedy in medical practice, and we offer them to you in the hope that you will not only find them entertaining but that some of you may find a solution to prevent their recurrence. We again offer a prize of one guinea for the best answer to each problem, the adjudicators to be the author and the Editor, whose decision shall be final. Write clearly and address your replies to the Editor, *Guy's Hospital Gazette*, Guy's Hospital, S.E.1, to be received not later than Saturday, February 4th.

THE Inter-Hospitals Boxing Championships are to be held at the Stadium Club, High Holborn, W.C.1, on Friday, February 3rd, at 7.30 p.m. Guy's have entries for all the eight weights, and we hope to better our excellent performance of last year, when we came near to winning the contest. Reserved seats at 10*s*., 5*s*., and half-a-crown may be obtained from Mr. J. H. E. Winston in the Medical School Office. Unreserved seats are obtainable at a shilling.

THE annual general meeting of the Lawn Tennis Club was held on December 9th, 1938, with Mr. Mollison in the chair. The meeting regretfully received the resignation of the President, Mr. Mollison, and thanked him for his services to the Club during his ten years of office. In his place Professor T. B. Johnston was welcomed as an old friend of the Club and as the captain of a team whose annual fixture with the Club had always been so enjoyable. The following officers were elected: Captain, H. R. S. Harley; Hon. Secretary, H. L. Joyce.

WE regret that in our last issue we omitted to mention the names of two old Guy's men who had received New Year honours. Lieutenant-Colonels James Bennett Hance, O.B.E., M.A., M.D., and Gordon Covell, M.D., both of the Indian Medical Service, were awarded the C.I.E. The former is at present Residency Surgeon in Mysore, Lieutenant-Colonel Covell being the Director, Malaria Survey of India. We apologise to both of them for our carelessness in omitting to mention these honours.

IT is gratifying to announce that the result of Matron's excellent broadcast appeal of last Sunday evening has up to the time of going to press—that is to say up to and including the first post of Thursday, January 26th—amounted to between £1,500 and £1,600. We understand that letters are still being opened as fast as possible and at the moment it is not known what amount will eventually be raised.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.

(*continued*)

At 5 we had a combined tea and cocktail party at Mrs. Eberts' house. Then at 7.30 dinner in a private room at the Mount Royal Club—a Buckingham Palace sort of place, with huge portals and flunkeys.

The Inter-Urban is very much what the Surgical Travellers will be in about ten years' time. They have decided to have no new members, and to live and die out together. Their ages range from about fifty to sixty-five, and they are most of them in pretty important positions in different towns scattered over Canada and the United States. I think all come from teaching places. They have reached the stage when members are dying each year, when last-minute excuses are becoming more common, and the meetings are getting smaller, while they all know each other's fads and weaknesses and how to handle them. The dinner is, therefore, a cheerful, brotherly, bantering affair, in which the one not too senile Englishman is a bit out of it, in spite of their efforts to bring him in. A sign that we are in Canada is that, instead of iced water at dinner and a binge in a bedroom after, we have a series of well-chosen drinks—cocktails, sherry, white wine, champagne, brandy—and all the party slowly mellow, passing from the eloquent to the oratorically solemn, and from that to the anecdotal. I am between the President and Archibald, a handsome, courtly, able and literary old gentleman. The only trouble, as I am already very tired, is the speech-making. In ordinary circumstances the Americans are not natural orators, but under the combined influence of good food, good wine, and the congenial company of old friends, there seems to be hardly any limit to what they can do. Three members had died, and we had kindly appreciations from their friends and colleagues.

The secretary read the minutes and this took well over an hour, for the last meeting was a visit with the Clinical Society to Europe, and we had a racy and really funny account of the various European Clinics, for the benefit of those who had not gone. Three things seem to have impressed

them : that the surgery at A was rotten ; that X, after demonstrating a block in an artery by an arteriogram and resecting the block, found he could not get the artery together again, and therefore resected two inches of the femur ; and that a man at B operated on a stomach through a 1½-inch hole and pulled it out bit by bit, ligaturing as he went, and finally chopped a section off it for no obvious reason. After this we had a series of speeches on the object of the Club, the aims of American surgery ; thanks to the President, the secretary, the organiser of the meeting, and so on. About 12.30 a.m. I was asked to speak, and finally, about 1 a.m., the party broke up.

Saturday, November 6th

Again in the lecture theatre of the Neurological Institute.

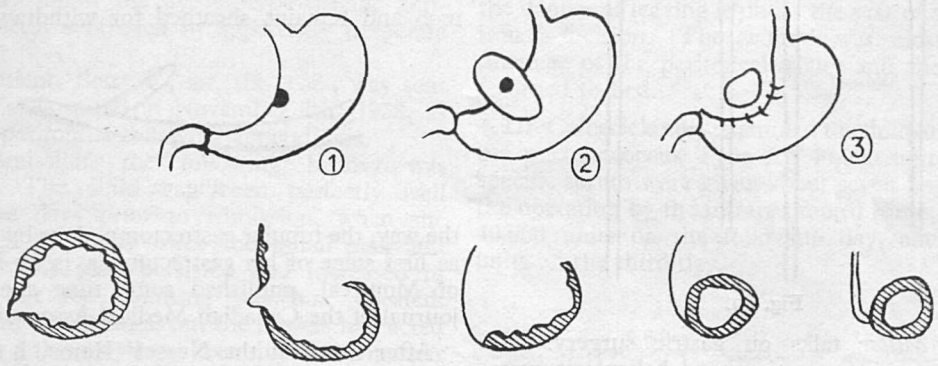


Fig. 88.

1. *Dr. John Armour*. A new method of gastroplasty. I will only put picture ; seemed of very doubtful value and pretty dangerous.

A. L. Wilkie read an excellent paper on the value of bile salt therapy in bile fistulæ. Apparently in America they are quite certain that loss of bile is harmful (see Ravdin's remarks) and, over long periods, dangerous—a point that I, at any rate, have entirely missed in the past.

In bile fistulæ the sodium taurocholate soon drops to about 10 per cent., suggesting that normally 90 per cent. of the daily excretion is reabsorbed. Dogs with fistulæ die in three or four weeks as a rule, living two months at most. Human patients tend to go to bits after a week or two of complete bile loss. The daily output of bile salts from a fistulæ is 2 to 3 grams per day ; in four days this falls to one-tenth of the amount. In a dog with biliary fistula, feeding 30 grams taurocholate a day keeps him alive indefinitely.

Case shown of total bile fistula under observation since June 11th. Operation, apparent carcinoma of common duct found and drained with T tube. A little lipiodol injected down tube reaches duodenum, but no bile has done so. His bile salts in the excretion nearly 0. Charts over some weeks giving daily administration and estimate of salts in the bile. He was first given 60 grammes sod. taurocholate daily, but this has now been reduced to 30 grams, which keeps his bile salts at normal level and him well. He was shown, and looked fine. Operation contemplated later.

Paper by *Hamilton Batzer* on serum lipase as means of diagnosing pancreatic lesions. Says it is valuable in acute and subacute pancreatitis, but not much use in carcinoma. Archibald considers it the most delicate of the pancreatic tests ; it also lasts longer than the diastase test, an important point, as the diagnosis of pancreatic disease is apt not to be thought of for some days.

A good reading-desk for lectures. The paper is hidden from audience, and well lit, but light does not fall on to surroundings or the lantern screen. Read sheets can be slipped on to lower shelf.

Dr. W. Mackenzie discussed the changing field of urology. The department used to deal almost entirely with men—old ones with prostate or younger ones with strictures. Then women came along. Now children exceed either, but not the two together. He showed lots of pictures of congenital obstructive lesions of all sorts. In many cases unilateral hydronephrosis is due to an aberrant renal vessel, but the actual obstructing agent is the fibrous bands accompanying the vessel. He divides the bands, and often finds he can leave the vessel. May take elipse out of large pelvis.

Mackintosh. Another attractive young man, talked extremely well on chest surgery. He discussed fixing upper lobe by "poudrage" preliminary to lower lobe resection, (1) allowing it to be used for respiration, (2) fixing mediastinum and heart during operation, (3) shutting off spread of possible infection in pleural cavity, and keeping any that may occur local. He does artificial pneumothorax and then, a few days later, blows some sterilised talc powder over the lung through an insufflator. Next day, or two days later, he draws off the air.

He likes spinal for chest operations, (*a*) because patient can co-operate, by moving, coughing, and so on; (*b*) because he has no pain and needs no morphia on returning from the theatre, and he can cough and move his diaphragm.

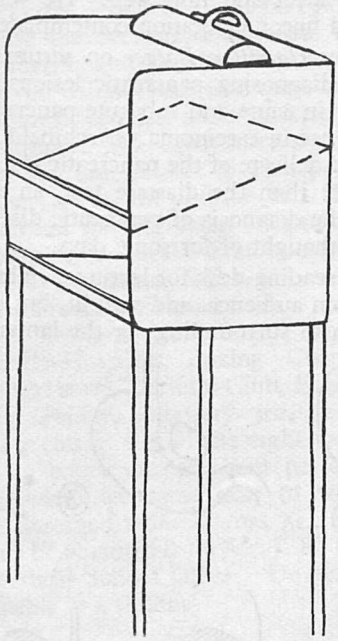


Fig. 89.

Gavin Millar talks on gastric surgery. He favours extensive resections and believes it cures all ulcer. All the arguments I used in my Oxford paper four years ago, and have since abandoned.

Archibald gives a very charming and scholarly talk on section of the sphincter of Oddi. He cuts it for various things, the chief apparently being recurring pancreatitis, and attacks of pain. Sphincter is cut for a quarter to a third of an inch, and does not regenerate. He has a nice instrument which is simply a Hegar dilator brazed into a right-angle handle. It looked useful

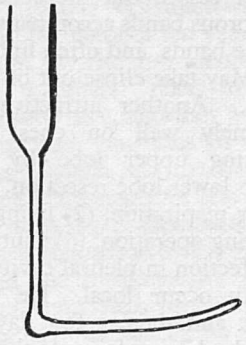


Fig. 90.

and has a handy curve. He passes this down to the papilla, and pushes the piot up towards the anterior duodenal wall, where he can feel for stone, growths, etc. He then makes a small nick through the duodenal wall on to his dilator point, and incises the sphincter. He showed us two sphincterotomes invented by admirers. One protruded a saddle knife like a urethrotome. The

Fig. 91

other had scissor handles; after passing closed into the duodenum, the blade is opened, engages in the papilla as it goes back, and then, on closing the handles, cuts the sphincter for one-third of an inch and remains sheathed for withdrawal. By

Fig. 92

the way, the tubular gastrectomy, done by Wookey as first stage of his gastrectomies, is by Reaume, of Montreal, published some time ago in the journal of the Canadian Medical Association.

After lunch at the Nurses' Home, I took the 3 p.m. train back to Toronto. Before leaving, a house surgeon took me up to the roof of the Royal Victoria Hospital to get a bird's-eye view. The St. Lawrence stretches away out to sea, about a thousand miles before the open sea is reached.

I have been hearing a good deal about the racial question in Canada, one of which I was totally unaware. Apparently the French Canadians do not mingle, intermarry, or show any tendency to be assimilated into a common national stock, as do the constituent races of America; on the contrary, they are increasing in numbers, influence and nationalistic views. They do not regard themselves as French, but as Canadians, the discoverers and colonizers of Canada, beside whom the settlers of British stock are mere upstarts. They are not French because they are essentially race-proud, tradition-proud, and devout Catholics, while France is bourgeois, atheist, communist and proletarian—all that they hate. They are not interested in the troubles of Europe, because they disregard France and England alike, and our wars are not their concern. They are increasing rapidly, because their religion forbids contraception, and preaches fertility. The Dionnes

are a bit above the average, but families of between twelve and eighteen are very common among French Canadians. In many towns within the last twenty years the population has changed from 10 per cent. French to 90 per cent. French. In the Frozen North, where Anglo-Saxon settlers starve and give up, the French form settlements round a priest, living a ghastly life, but breeding like rabbits. In many parts of Canada (for instance, in Montreal) the notices are first in French then in English. On the radio the Canadian stations announce first in French. The Dionne " quints " (as they call them) have not yet been taught any English. In this Montreal meeting no French surgeon took part.

(*To be continued.*)

A Case of Pneumococcal Peritonitis

By A. E. Thomas, Esq.

THE case described below is reported as a typical example of an uncommon disease and to emphasize the dramatic improvement which may follow the use of type-specific anti-pneumococcal sera even in apparently desperate cases.

The patient, Betty P., *æt.* six years, was sent into Guy's Hospital on November 7th, 1938, as a case of peritonitis following appendicitis.

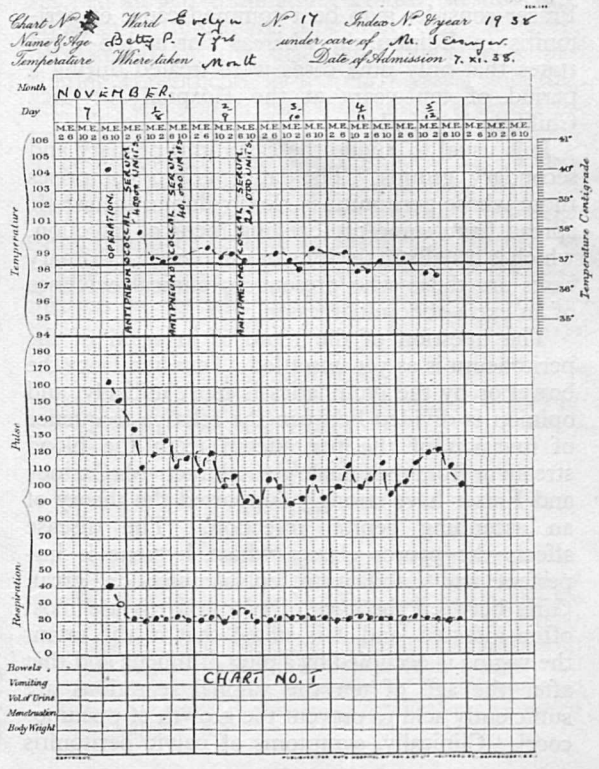
On admission, the following history was obtained. The child had been perfectly well until three days prior to admission, when she complained of severe lower abdominal pain and vomited. The pain persisted and increased in severity, but the vomiting was not repeated. Micturition was normal, but the bowels had acted repeatedly; this may have been due to the mother giving the child doses of syrup of figs on the two days which preceded admission and a dose of castor oil on the day of admission. The child had been given hot water, but no solid food since the onset of the symptoms.

On examination, the child was sitting up in bed, was flushed, bright-eyed and breathing rapidly. Mentally she was extremely apathetic, and she did not resent examination. The temperature was 104.4 and the pulse and respiration rates 164 and 40 per minute. The child's chest presented no physical signs. The abdomen was moderately distended and was tender and rigid on both sides below the umbilicus, but the tenderness was more marked on the right side.

A diagnosis of " probably pneumococcal peritonitis " was made and immediate operation was performed to exclude appendicitis and to obtain some of the peritoneal exudate for " typing " the pneumococci present.

The abdomen was opened by Mr. Spalding through a " gridiron " incision. The peritoneal cavity contained much odourless, turbid fluid in which floated particles of " lymph." The appendix and small intestines were covered with a deposit of " lymph," but showed no other abnormality. A Meckel's diverticulum was sought for but was not found. Some of the exudate was collected, and the appendix removed because of the danger of leaving it under the scar of a " gridiron " incision. The wound was closed with drainage of the peritoneal cavity and the patient returned to bed.

Dr. Colbeck kindly examined the fluid and found the pneumococcus Type I. 40,000 units of the specific serum were given about seven hours after the operation by the intraperitoneal route, another 40,000 units on the following day, and 20,000 units on the third day.



The first injection of serum produced a remarkable change in the child's condition. At 6 a.m. on the following day, only four and a half hours after the injection, the child's temperature had fallen from 104.4 F. to 100.4 F. and her pulse and respiration rates from 166 to 134 and 40 to 24 per minute. By 10 a.m. the temperature was 98.8 and the pulse and respiration rates 114 and 22 per minute respectively. The child's convalescence was only disturbed by a mild attack of serum sickness on the eighth and ninth days after operation. She was discharged well on December 6th.

Chart I is the chart of the patient described above. Chart II is introduced for comparison. This is the chart of a small boy admitted to another of Mr. Slesinger's beds at about the same time. He was suffering from general peritonitis secondary to the perforation of his appendix. His illness had lasted for six days, and he was desperately ill on admission. Following the removal of his appendix, drainage of a fæculent peritonitis and blood transfusion, he made a slow and halting recovery, which contrasts very markedly with the dramatic crisis of the pneumococcal case.

ÆTIOLOGY

Pneumococcal peritonitis is commoner in some districts than in others. Thus McCartney and Frazer consider it to be a common cause of peritonitis in Edinburgh, whereas Barrington-Ward states that only nine cases were treated during a period of ten years at the Hospital for Sick Children in London.

It is usual to divide the cases into primary and secondary groups. The latter group comprises those whose peritonitis is clearly due to metastatic spread from some pre-existing focus of infection, which is usually in the lung or middle ear. Primary cases are those who present no clinical evidence of an extra-abdominal lesion.

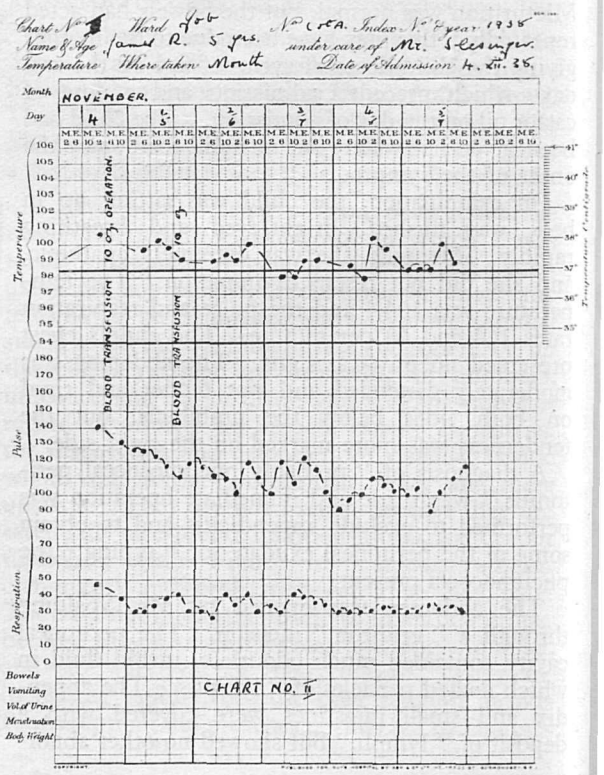
The question of the route of invasion of the peritoneum is as yet unsettled. Invasion from the bowel or by the lymphatics is most unlikely, and opinion is divided between the relative frequence of invasion of the peritoneum from the blood stream or from the female genital tract. McCartney and Frazer have strongly supported the theory of an ascending genital infection. The disease affects the poorer classes whose hygiene is imperfect and liability to vulval infection great. Girls between the ages of two and ten are most often infected, and it is stated that in the infant the vagina is occupied by a plug of mucus and that after the age of ten the vaginal secretions are sufficiently acid to prevent the growth of pneumococci. Clinically, symptoms of pelvic peritonitis may precede those of generalised infection, and bacteriologically the organism is recoverable from the vagina and tubes as well as from the peritoneum.

The hypothesis of a bacteræmia or septicæmia following a symptomless invasion of the blood stream through an unnoticed lesion of the pharyngeal, bronchial, or some other mucous membrane and ending with a metastatic invasion of the peritoneum has strong clinical support. The disease does occur in boys, though much less commonly than in girls. Some cases present septicæmic symptoms from the very start, and the abdominal infection appears to be of the nature of a fixation abscess. In the cases where the peritonitis is secondary to a distant lesion the probabilities are all in favour of blood-borne infection of the peritoneum.

Barrington-Ward believes that there are two different types of the disease, and that the commoner form is secondary to a salpingitis and that the other arises idiopathically as a general infection of the peritoneum, perhaps blood-borne, perhaps due to direct infection from the intestine.

CLINICAL TYPES

Cases of pneumococcal peritonitis, like cases of pneumococcal pneumonia, vary greatly in severity. The disease may be of a fulminating type and kill



in a few hours, or it may be so insidious that an encysted abscess forms after some weeks of vague illness. Cameron points out that it is possible to divide the course of the disease into three stages : The stages of onset, fever and abscess formation.

THE STAGE OF ONSET

This lasts for the first four or five days of the illness. The onset is usually sudden and definite and may be preceded by diarrhœa. There is an attack of abdominal pain and within a few hours the child is gravely ill, with high fever and a rapid pulse and respiration rate. The mental condition almost invariably shows active delirium or drowsiness and apathy. Abdominal pain and tenderness are the rule, but rigidity is often slight as compared with the extent of the peritoneum which is involved. Herpes, when present, is a valuable diagnostic sign. This stage of the disease is apt to be mistaken for a fulminating appendicitis or for an early pneumonia with referred abdominal signs. Diagnosis is complicated by the danger of overlooking a perforated appendix. Appendicitis is so common and is such a fatal condition in children that the surgical diagnostician will need to be very confident to diagnose pneumococcal peritonitis even when the signs are typical of the disease, and he will need still more confidence if he is going to advise medical or serological treatment without confirming his diagnosis by laparotomy.

THE STAGE OF PNEUMOCOCCAL FEVER

Many patients die during the first stage. In the cases who survive the first four or five days a definite improvement occurs. For two weeks or more the temperature remains elevated as a sustained or continuous fever, but as the disease passes into its third stage the sustained fever gives place to the intermittent type of pyrexia which is always so suggestive of pus formation. During this phase of sustained pyrexia the patient complains of intermittent attacks of abdominal pain, of anorexia and of wasting, and on examination the abdomen is found to be slightly distended and tumid. The disease, in this phase, is often mistaken for typhoid fever or tubercular peritonitis.

THE STAGE OF ABSCESS FORMATION

As the swinging temperature succeeds the continued pyrexia of the second stage, so does clinical evidence of intraperitoneal pus formation appear. There may be evidence of fluid free in the peritoneal cavity, or an encysted abscess may be palpable through the abdominal wall. If the abscess is not opened surgically, it will rupture at the umbilicus or into the bowel. This stage is often mistaken for tuberculous peritonitis.

PROGNOSIS

According to published figures the prognosis is bad ; thus Barrington-Ward reports a mortality rate of 74 per cent. in a series of 23 cases treated at the Hospital for Sick Children. In general, the prognosis would seem to be bad in the early cases, particularly if the invasive symptoms have been severe ; in the second stage the prognosis is better and the cases which reach the third stage recover as a rule. The recent discovery of the sulphanilamide derivatives which are active against pneumococci, and the use of sera in the right cases, should reduce the mortality rate considerably.

TREATMENT

Surgical opinion is now opposed to draining thoracic empyæmata until definite pus has formed. The drainage of a pleural collection of turbid fluid is not only useless, but positively harmful, and by analogy it might be better to watch cases of pneumococcal peritonitis until the third stage, when pus has formed and the patient has developed an active immunity against the infecting organism. Immediate operation is, however, necessitated by the diagnostic problem of excluding appendicitis in the early cases, and this necessity will remain until some simple and reliable test is forthcoming which will enable the diagnosis to be established with complete accuracy. Cases diagnosed in the second stage should be watched until they enter the third stage, and all third-stage cases should be drained at once.

My thanks are due to Mr. Slesinger for permission to describe this case, which was under his care.

REFERENCES

Barrington-Ward, Sir L. The Abdominal Surgery of Children. *Ox. Med. Pub.*, 1937.
Cameron, H. C. *Guy's Hosp. Rep.*, lxxxiii, 411.
McCartney and Fraser. *Brit. Jour. Surg.*, ix, 479.

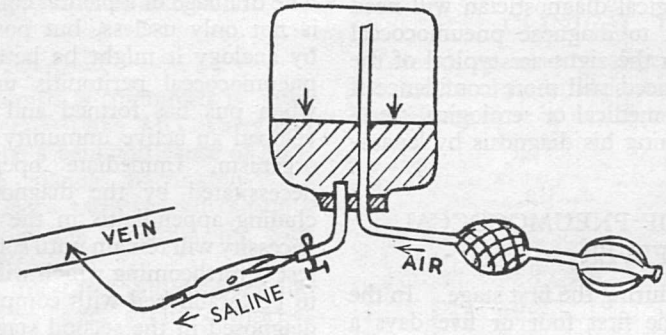
The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

What Do You Suggest ?—No. 1

(The first of a series of articles describing actual tragedies which need not have occurred, and inviting suggestions from readers as to how they might be prevented. A prize of one guinea will be paid to the author of the best suggestion sent in to the Editor on or before Saturday, February 4th.)

NURSE C. had listened to so many lectures on medical subjects that one might pardon her for a certain vagueness in the more practical aspects of her nursing duties. She had developed a rather scientific nursing mind which worked in calories, ion diffusions and dysvitaminoses, and cared less for mere practical competence.

When Sister said to her : " Now, Nurse, Mrs. T. in No. 9 is to have her post-operative saline from one of those new pressure reservoirs ; see that it is set to give about two drops every three seconds," she recalled the apparatus at once. (We show you a diagram of it so that you may appreciate the scope of her training.)



The reservoir is a closed one, inverted, and with a forced (pressure bulb) feed of air above the fluid, which is driven into the vein at a rate controlled by the ordinary sort of drip placed in the tube leading to the needle. The advantage is that the rate of flow is absolutely even, the forced nature of the " feed " preventing the needle from clogging and the vein from collapsing.

In actual fact, as it came out in Court later, Nurse C. had heard of the apparatus all right, *but had never actually used one*. She saw nothing difficult in it, however, and actually worked out the time when, at the rate of flow ordered, the reservoir would become empty and require attention—it would be almost exactly at 10 p.m. The infusion was started and proceeded well.

At about 9.20 p.m., as she was passing the bed, her attention was drawn to Mrs. T. by a queer gurgling sound. When she leaned over the bed she was horrified to see Mrs. T.'s mouth wide open, her breath coming in long-drawn gasps, and her eyes already staring a little glassily into the distance. She rushed for the telephone, and the house surgeon was there in less than three minutes, but it was too late. Mrs. T. was dead.

Bright red blood with bubbles of air frothing it oozed from the vein when the needle was withdrawn, and the house surgeon, glancing at the reservoir, saw it to be empty. Mrs. T. was a fresh pink colour, and the large veins in her neck crepitated with bubbles of air. Post-mortem showed that a large quantity of air had been forced into the arm vein (as the reservoir became empty), being beaten into a fine red froth in the right side of the heart and filling the main pulmonary aorta. Death was clearly due to air embolism.

It seemed to Nurse C. such a folly, such an unnecessary mistake to have made ; she had been used to giving intravenous salines under pressure of gravity, and had never been told of any particular danger of this kind. She had forgotten that the introduction of air under pressure above the saline introduced also a new danger.

The Coroner who held the inquest on Mrs. T.'s death remarked, quite rightly, that it seemed rather a needless loss of life, and further that it might so easily recur that he felt some safety device was needed to prevent further fatalities of the same kind.

What do you suggest ?

Paraodontal Travels

A Paper read to the Dental Society on Monday, 14th November, 1938, by R. F. Pusey, Esq.

MR. CHAIRMAN and GENTLEMEN,—It is difficult, in addressing a students' society on a clinical subject, to hold the interest of the younger members in a part of the dental curriculum which they have not yet reached, so I propose to-night to intersperse the dental matter with remarks of a more general nature describing some of the things I saw recently in Vienna and in Canada and the States.

The journey from London to Vienna was comparatively uneventful. I find it amazing that the weather forecasters should so often miscalculate the effect of wind on water as to report "Wind, light—sea, slight," when one's worst fears prove justified as soon as the steamer leaves the shelter of the harbour. This was no exception. We had the company of the choirboys from the Vienna Burgkapelle, who had been giving recitals in London, and one noted with sympathy the preoccupation of the gentleman in charge on arrival at Ostend as he tried to sort out the healthy and stable from the green and unstable members of his flock.

The dental institute in Vienna is part of the general hospital, and it has ample accommodation in a wing of the older part of the buildings, which are built round a series of courtyards. There is good in-patient accommodation in the Kiefer Station, a separate department which caters for both minor and major oral surgery. Since 1925 an attempt has been made to regard dentistry as a special branch of medicine, and all students must first qualify medically, the two additional years of clinical study which all medical students must spend subsequent to qualification are then devoted to purely dental subjects by those proposing to practise dentistry. An examination in dental subjects must then be passed at the end of this time. The long training thus undertaken tends to produce a man who approaches dentistry from a biological rather than a mechanical aspect, but who is not necessarily so efficient technically as a man from an English or American School. I do not know how this course of study has been affected by the "Anschluss," since it is not necessary for a dental student in Germany to complete a medical qualification previous to his dental studies.

My time was divided between the University laboratories, Professor Gottlieb's practice, and the research laboratories where experimental investigations in root canal therapy on dogs were in progress, but, since my chief interest was in the treatment of patients suffering from pyorrhœa, I shall now deal in some detail with this branch of the work.

The teaching of the more academic sides of the subject in Vienna followed the theories of Gottlieb and of his co-workers Orban and Kronfeld. Each of the latter have published textbooks in English, and their ideas are summarised in the most recent editions of some of the textbooks by English authors, but I will briefly describe these now for the benefit of those of you who are not familiar with them.

The first idea to grasp is their conception of what constitutes the normal relation of the tooth to the surrounding tissues. In a developing tooth, after the formation of the enamel, the remnants of the enamel organ form the united enamel epithelium which is fused on the one side with the surface of the enamel by the enamel cuticle, and on the other side becomes fused with the deep surface of the epithelium of the gum as the tooth erupts towards the surface. After the cusps have perforated the surface of the gum, the same relation still exists at the sides of the crown of the tooth. This constitutes the epithelial attachment, the position of which is shifting progressively nearer and nearer to the neck of the tooth as eruption continues, till the whole of the anatomical crown (i.e., the part of the tooth covered with enamel) has erupted and the epithelial attachment is at the level of the neck of the tooth. The epithelium thus passes straight across from the surface of the gum to its attachment to the enamel, and at no time is the physiological existence of a gingival trough of any depth acknowledged.

This corresponds more or less with the generally accepted idea of a fully erupted tooth, but the Gottlieb school believes that the potentiality for eruption continues during the life of the individual. This continued eruption exists in two forms, the one an active eruption of the tooth towards the occlusal plane, the other a passive eruption by which the potentiality of the epithelial attachment to grow down the surface of the tooth continues, so that the cementum becomes exposed to the mouth and thus forms part of the clinical crown (*i.e.*, the part of the tooth bathed by saliva).

The rate of this physiological downgrowth of the epithelial attachment is an indiviudal variant depending upon the ability of the individual to

form new surface layers of cementum, and this introduces us to the idea of " the vitality of the cementum." The retention of a tooth in the jaw is considered to depend upon the ability of the pericementum to form new layers of cementum into which the newer fibres of the periodontal membrane are inserted. Failure of this new formation would result in lack of attachment of the new periodontal fibres with a subsequent disuse atrophy of the corresponding part of the alveolar bone and a downgrowth of the epithelial attachment over this no-longer-vital part of the cementum. If this process occurs at the same rate around the whole tooth, we are left with the senile form of gum recession, in which the cementum is exposed, but no pocket is formed; this is entirely physiological. If it is accelerated over one area but not over the rest of the tooth, we are left with a localised vertical pocket, since the epithelial attachment has descended down the cementum to form the floor of the pocket, whilst the gum tissues remain supported on either side by normal tissues, so that a soft tissue outer wall of the pocket remains. A pocket formed in this way becomes a potential stagnation area where food debris, bacteria and tartar may collect and act as an irritating stimulus for further epithelial proliferation, and cause bacterial infection of the soft tissues with the consequent production of pus. This is the conception of the method of production of the " paradental pyorrhœa " of Gottlieb's classification, which is thus seen to consist of localised deep pockets exuding pus, and which no amount of simple scaling will obliterate.

A number of clinical and histological facts can be produced as evidence for continuous eruption, but a localised loss of vitality of the cementum would seem to be an attractive theory as yet unsupported by definite evidence.

Of the other two types of pyorrhœa of Gottlieb's classification the " dirt pyorrhœa " is by far the commonest and is said to constitute about 90 per cent. of the total cases. This is essentially a marginal gingivitis following lack of oral hygiene. It accompanies tartar deposition and the initial pockets are formed more by the swelling of an inflammatory œdema of the soft tissues than by actual epithelial downgrowth, so that we find generalised pockets of shallow nature, a horizontal type of shallow pocketing rather than a vertical type of deep pocketing. Removal of the source of irritation is followed by healing of the soft tissues, with a consequent disappearance of inflammatory œdema and obliteration of the pocket. If the irritating factors are allowed to persist, a descent of the epithelial attachment does occur, but this generally takes place around the whole surface of the tooth rather than in one localised area, since the irritating factors tend to be spread right the way round the tooth. Some clinicians recognise this type of pyorrhœa, *i.e.*, the type starting essentially as a marginal gingivitis caused by factors operating in the mouth cavity, as the only clinical entity; the production of deep pockets without chronic irritation and the occurrence of a type of pyorrhœa starting as a lesion of alveolar bone with subsequent secondary pocket formation are not recognised. On the other hand there are workers who consider that a lesion starting as a simple gingivitis should not be included in the consideration of pyorrhœa at all, but that the term should refer only to a type in which factors operating in the tissues themselves, rather than in the mouth cavity, are the primary cause of tissue breakdown.

The third group of Gottlieb's classification, " diffuse alveolar atrophy," includes the latter type of lesion. It is described as a rapid loosening and wandering of the teeth which accompanies a diffuse absorption of alveolar bone and cementum. There may be no evidence of gingival irritation, and pocket formation occurs only if the hard tissues are absorbed around the neck of the tooth, in which case the rapidity of the process is of diagnostic significance. Absorption may show a preference for the apical part of the tooth, in which case tooth-loosening occurs without any gingival change. This is a description of a rarer condition, and the ætiological factors are presumed to vary from case to case. They may be operating temporarily only, since the teeth may tighten again at a later date. The causal factors in diffuse atrophy are acting via the blood stream, and the lesion must therefore be regarded as an oral symptom of a systemic disturbance, of which there are several capable of causing an absorption of bone, rather than as an expression of a purely local process. I wish to stress again that such a condition is considered to be a rare occurrence, that its very existence is denied by some, whilst others are equally convinced that it forms an important group which has received insufficient attention in the dental literature.

TREATMENT

The treatment of both dirt pyorrhœa and paraodontal pyorrhœa in Vienna was the same. A disease in which local factors are the cause must obviously be treated by removal of those local factors. In the case of dirt pyorrhœa the mechanical irritation of the soft tissues by tartar and debris, or by faulty dental restorations, together with a lowered resistance of these tissues

to bacterial invasion, are the local conditions to receive immediate attention. Removal of tartar by thorough scaling is the most important single factor in the treatment, and once it has been removed the endeavour to prevent further deposition is equally important. All other forms of treatment practised in Vienna were either aids towards the perfect performance of these two all-important points or were useful, but not absolutely necessary, adjuncts.

Scaling.—The object of this is not merely to remove the gross masses of tartar, but of much greater importance is the removal of the small hidden deposits of subgingival calculus and the planing of the cementum surface to remove the small pits which once held the ends of Sharpey's fibres of the periodontal membrane, so that a perfectly smooth polished cementum surface is finally obtained. This presents an area much less liable to further calculus deposition than does a rough and pitted surface. One finds students attempting to differentiate between a paraodontal scale and an "ordinary" scale; let me stress here that this is an entirely false division. Scaling is either perfectly and completely performed, or it is incomplete, in which case it might just as well never have been attempted at all.

The actual technique you learn in the Dental Department, so I will not describe it here, but do remember that efficient scaling is as important in paraodontal work as cavity preparation is in conservative dentistry, and that as many teeth are sacrificed because of the surrounding gum lesions as because of lesions in the actual dental tissues. The instruments used should be capable of being passed between the tooth and soft tissues into the depths of a pocket without harming the soft tissues, and for this purpose either a fine hoe-shaped blade used with a pull action or a flat blade with file-like serrations also used with a pull action will be found most useful. These instruments can be obtained with the working blade set at various angles to the handle, so that the removal of calculus from all surfaces of the tooth is greatly facilitated. In the presence of gross inflammatory hyperæmia or hyperplasia of the gingival tissues it is often extremely difficult, if not impossible, to remove calculus from the depths of a pocket, and in these cases a series of wax pocket packings are inserted.

Wax Pocket Packings.—This, together with oxygen insufflation, forms part of the Dunlop technique. The essential of the treatment is the insertion of a medicated paraffin wax between the soft tissues on the one side and the calculus and tooth surface on the other. This has the effect of separating the inflamed tissue from the calculus, and so abolishing the factor of mechanical irritation; at the same time it acts as a bandage covering the broken surface of the gingival epithelium. The wax is inserted under pressure from a syringe, and is squeezed firmly down into the pockets with the fingers, so that the pressure will have some action in decreasing the œdema, but, what is of greater practical importance, the mouth of the pocket is forced open, thus facilitating the subsequent removal of calculus. The wax is easy to insert provided it is used at a temperature of about 120° F.; this is important, since if the temperature is too low the wax solidifies in the nozzle of the syringe, and if it is too high the wax is too fluid to control, and it is impossible to exert pressure on it since it flows out between one's fingers. I believe that the medication of the wax is of very minor importance, and that the value of the treatment lies largely in its mechanical action. It is thus comparable with the zinc oxide and wool packing advocated by Fish. The wax is not difficult to retain interdentally if the operator inserts it so that it enlarges into a definite button on both the buccal and lingual sides of the tooth. In the case of teeth spaced far apart, or in pockets on the buccal or lingual sides of the teeth, the use of silk ligatures passing round the teeth and embedded in the body of the wax is an aid to retention. I have seen quite deep pockets completely obliterated by this method, but the frequent visits by the patient for renewal of the wax present a disadvantage. The type of pocket formed largely by œdema may be obliterated easily by wax treatment, but the sphere of practical use would seem to be rather in the aid to scaling and in the protection of the soft tissues than in active pocket obliteration.

Gingivectomy.—A pyorrhœa pocket once formed is always an area of danger to the patient, since, however well the dental surgeon may scale the tooth and clean out the pocket contents, it is never possible for the patient to continue this as effectively at home, and therefore it must always remain an area of stagnation. It follows that the pocket must be obliterated. This is most easily and effectively performed by removing the soft tissue wall of the pocket either by the use of chemical caustics, the knife, or by electro-coagulation. Here again you see this performed in the Dental Department, so I will not take time to describe it in detail. Each of the methods is satisfactory, and the use of one rather than another is entirely a matter of personal preference. Your final result should consist of complete removal of the pocket wall so that the cementum wall is easy of access to the patient for cleaning. A pre-operative course of scaling, wax packing, and

oxygen insufflation is advisable in an endeavour to improve the tissue tone. In each of the schools I visited, stress was laid on the teaching that extensive gingivectomy is rarely justifiable; the operation is indicated for localised deep pocketing and the shallower but more extensive pocketing can be obliterated satisfactorily by other means.

Oxygen Insufflation.—This consists of blowing oxygen into the gum tissues by applying the gas under a pressure of about 35 lb. per square inch to the mouth of the pockets. In order for gas to enter the tissues it is clearly necessary that there should be breaks in the epithelium lining the pocket or between the epithelium and the cementum; this is always the case, and in practice there is no difficulty in forcing the gas into the deeper tissues. This occurs either as gas emboli entering the finer lymphatics of the gum or as a miniature type of surgical emphysema of the tissues, indeed a remarkable degree of ballooning of the tissues can be produced by injudicious use of the method. The rationale for its use advanced by some of its advocates presupposes a venous stagnation in the deeper tissues of the gum and periodontium, although an inflammatory hyperæmia is manifestly present in the gingival margins. This venous stagnation is of necessity followed by a stagnant type of anoxæmia with a consequent retention of tissue metabolites and a lowering of the tone of the gum tissues. Invasion of these tissues of lowered resistance by the omnipresent mouth bacteria is then supposed to occur. Whether this explanation is really true is a debatable point, but in practice this method of therapy is useful in accelerating the return of the tissues to normal, though it can clearly exert only a very temporary action. This action is prolonged to some extent by bubbling the oxygen through vasodilating drugs so that some of these are carried into the tissues with the vapour. A very limited series of experiments on the jaws of sheep produced results which suggested that definite tooth tightening was obtained by vapour therapy, and that this tightening was greater than that produced when an inert gas such as nitrogen was used, so that some factors other than pure mechanical stimulation are operative. The method was used as a routine both in Vienna and Toronto, and would seem to have some place in periodontal treatment.

Gum Stimulation.—Once the gums have returned to a normal condition it is the duty of the patient to prevent the further deposition of tartar, and to maintain good tissue tone by the use of a brush and some form of interdental stimulator. Tartar starts as a matrix of soft debris into which calcium salts are later deposited, and if the matrix is removed while it is still soft, no tartar will be formed. It is therefore the duty of the dental surgeon to instruct the patient in correct tooth-brush usage. This should be done by illustration in the patient's mouth before a mirror, and it should be performed somewhere in the middle of the course of treatment so that it can be checked later if necessary. It is all-important that it should not be relegated as an afterthought to the last appointment on the assumption that the patient learnt correct tooth-brush usage as a child from his nurse. The very presence of tartar is an immediate indication that the method of use is not correct. A modified Charter's method whereby the gum is first stimulated with the sides of the bristles and any debris at the neck of the tooth subsequently removed by a wiping movement is the most satisfactory. A brush, however, is often useless for the interdental spaces, and some form of fine stimulator is indicated. Interdental cleaning is not difficult in cases in which some tissue has already been lost, but it is admittedly hard to find a method which is sufficient in early cases and which does not require the patient to spend a large part of the day over his mouth toilet.

The dental treatment of the rarer cases of the diffuse atrophy type of lesion practised in Vienna was entirely symptomatic and consisted in splinting the wandering teeth in position with various wire appliances, and in relieving them from the further insult of a heavy occlusion, when this existed, by grinding them free of the bite with stones. Any more general treatment is considered to pass outside the realms of dentistry.

These briefly are some of the theoretical conceptions and the main lines of treatment of the commoner paraodontal lesions, in use in Vienna.

It was my fortune to be in Vienna during the *Anschluss*, and it may interest you to hear some of the things one noticed there at that time. I went to Vienna in January last with no interest whatsoever in Central European politics, but after a very few days there it was evident that politics occupied a prominent place in most people's thoughts, and in many people's conversation also. You must not suppose that suppression of political opponents and the production of a state of fear, or at the very least guardedness in airing one's views for fear of the consequences, is peculiar to the Nazi regime. The old regime of Dollfuss, Schushnigg and the Vaterlandisher Front could be quite severe with those who did not agree with its views, and were so unwise as to show this actively; I will mention only the cases of two of the demonstrators in the dental institute who had served terms of imprisonment apparently only because they attended

a Nazi political meeting. Everyone knew that the majority of the younger people were Nazi at heart, so that it would merely be a matter of time before they formed a true majority. Some English friends in the University estimated that about 70 per cent. of the University students were potential Nazis, the remainder being Jews or Roman Catholics actively interested in their religion. It was rather harder to judge the true attitude of mind of the older population; there were those who were intensely nationalistic and were, therefore, staunch supporters of the Vaterlandisher Front; there were those who supported the Vaterlandisher Front only because this was a necessary prelude to Government appointments; there were those who were Nazis, but the proportion of these was not nearly as great as among the youths, and I doubt if the most ardent of them expected complete submergence of their country in the Reich. The eventual advent of National Socialism to Austria was thus at the very least a definite possibility, and this made the Jews extremely apprehensive as they watched the fate of their fellows over the border.

Some weeks before the *Anschluss* occurred one had heard of the massing of troops in Bavaria. It was said that the Austrian Nazis were to have damaged their own property to give the German troops an opportunity to enter Austrian territory on a pretext of keeping order, since the Schushnigg regime was no longer able to do so, but this was aborted by the action of the Austrian police. How true this may have been I do not know, but the apprehension was certainly increasing with uncomfortable rapidity.

After Schushnigg's visit to Berchtesgarten early in March the Nazis were given some measure of political representation and the streets of Vienna began to show some activity; previous to this the undercurrent of affairs had not been reflected much in everyday life.

I had made a practice of walking back from the University to my home via the Ring, which is very beautiful even in winter, rather than by the shorter way through the Old City, and thus by chance I was forced to join a crowd outside the Government Building (which is on the Ring) to hear Schusnigg's speech announcing the plebiscite. Being a national occasion the crowds were not unlike those which gathered outside Buckingham Palace on Coronation Night, with the usual cheering, flag-waving and band-playing; one noticed a few days later that the same bands were playing the same tunes in honour of Hitler, apparently having decided to adopt a comfortable " Vicar of Bray " attitude.

After this, rival bands of hooligans paraded the streets in the Old City during the evenings, and held miniature battles among themselves, but I saw no disorder as great as that which the Borough enjoyed during Mosley's visit a year or two ago. If a certain type of newspaper reporter sees twenty toughs fighting it is rapidly magnified into a riot, and this is what probably happened. Police were present in large numbers every night and regularly paraded outside the Opera and closed that end of the Kartnerstrasse (the Piccadilly of Vienna) as a precaution, but most people were hopeful sightseers like myself, rather than people intending to stir up trouble, though many of them seemed to derive the deepest satisfaction from shouting " Heil! " without anyone to oppose them, rather like a schoolboy enjoying an orgy of smoking during the school holidays.

Window-smashing and Jew-baiting in the streets became a common occurrence, and one was faced with the disgusting spectacle of a crowd of Yahoos gathering round one unfortunate individual to offer as many insults as they could think of and, like as not, following the wordy warfare with more practical hostilities.

One noticed that, in spite of the active propaganda on behalf of the Vaterlandisher Front which took the form of dropping pamphlets from airplanes, painting pictures of Schushnigg over all the pavements and the perpetual roar of political slogans from loud-speakers erected at vantage points, the Nazis produced no propaganda of this type at all, so that one became suspicious of what the future course of events might be.

After the *Anschluss* actually occurred the whole town seemed to charge headlong into a political hysteria. New newspapers appeared daily, most of them devoting their space almost entirely to violently rabid anti-Semitism. Everyone went into the streets to shout; people rapidly but furtively removed the Austrian cross from their buttonholes and substituted a swastika, then tried to atone for their past lack of foresight by shouting louder than anyone else. " Sieg Heil," " Sieg Heil," shouted in unison with maddening frequency seemed to form the whole vocabulary of the man in the street, and the medical fraternity must have been fully occupied later in the treatment of political laryngitis. When the noise was augmented by about 150 German bombers flying over in formation, one was glad that nothing more lethal was dropped than pamphlets giving a welcome to their new citizens.

But while some of one's friends were rejoicing at what they regarded as political freedom, one knew that others, from whose hands one had received a most charming hospitality and whose only fault was the mischance of birth into a perse-

cuted race, were remaining silently in their homes contemplating the disruption, or possibly the ruin, of their lives and weeping over the suicides of their friends.

My work with Professor Gottlieb was unfortunately forced to terminate, and, after three days of waiting for the entry of Hitler into the town, an entry which was delayed many times and which finally did not occur until after my departure, I decided to leave Vienna to its conflicts of joy and sorrow.

The return journey was a mixture of amusement and annoyance. The inevitable glut of rumours ran the length of the train and all proved to be untrue, but not before some refugees had left the train at Innsbruck in the mistaken belief that the frontiers were closed. One was vastly impressed with the amount of military material of all kinds moving in the direction of Vienna, and with the number of swastika flags in all the small towns, villages and farmsteads by the railroad, where the very suspicion of possession of such a thing would a few days previously have been a punishable offence. The moonlit journey through the Arlberg would at other times have taken one's whole attention, but the feeling of suspense apparent on the train overweighed most people's appreciation of scenic beauty, so that arrival at the frontier at 3 o'clock in the morning was welcomed with relief by the would-be refugees. Three and a half hours of rigorous search of all personal baggage and of the train, compartment by compartment, then followed. The upholstery was fingered, the blinds were searched, the ventilators and heating apparatus were searched. People regarded as suspicious were taken behind the screen and presumably more thoroughly searched; one noticed the apprehension of a group of nuns who saw this taking place, and contemplated their possible fate. Travellers in one of the first-class compartments, on hearing how small was the amount of money they could take out of the country, had tipped the sleeping-car attendant handsomely in advance in order to reduce the amount of money they were carrying; the attendant was promptly arrested on the frontier on the charge of exporting money, and while he explained the circumstances to the Brownshirt, one could see this gentleman considering the possibilities of becoming a sleeping-car attendant. There was further trouble for a small group of refugees on the French frontier, for they were travelling with Austrian passports which required no visa, but the French were now considering them German subjects, for whom a visa is necessary, so they were at least temporarily refused admittance; I wondered how long they could live on their twenty Austrian shillings which no one seemed anxious to accept in Switzerland.

The journey to Canada was somewhat of an anti-climax after this. One soon settles down to the suspended animation of a routine life on board, and this continued undisturbed till we were nearing Newfoundland, when we sighted two icebergs. The day after this we ran into thick fog, and the ship remained still the whole day, since ice and fog are not considered good companions at sea. It was the first trip of the year up the St. Lawrence, and we had to run through light pack ice for a couple of hours before entering the gulf of St. Lawrence. The first impression one gains in Canada is that of distance. It would take rather more than five days and nights in the train to travel from Nova Scotia to British Columbia, so that my journey of about 350 miles from Montreal to Toronto was a mere nothing. Quebec, one had noticed, is rather like a French provincial town, but Toronto, and in particular the down-town section, is a near approach to an American town with its square layout and skyscraper buildings.

The Dental School was as large, and the equipment as good, as one had been warned to expect in the States and in Canada, though the authorities were bemoaning the fact that these particulars were not as good as in some of the American schools, which one found later to be the case, though the Toronto School is infinitely better in these respects than I have seen in any European school.

The periodontal department is in charge of Dr. Box, and his classification of pyorrhœa is in use over much of the continent. Briefly it is this. Chronic periodontitis is divided into two groups, the simplex and the complex forms. Chronic periodontitis simplex consists of lesions starting on the surface of the gingival tissues, and extending from without inwards. It corresponds with the "dirt pyorrhœa" of Gottlieb's classification, and so is in essence the effect of chronic irritation of a mechanical or bacterial nature on the tissues.

In chronic periodontitis complex, the primary lesion is in the pericementum, but gingival changes may later be superimposed on this. The pericemental lesion is described as a "rarefying pericementitis fibrosa" consisting of a proliferation of the endothelium lining the blood vessels with their eventual occlusion, and at the same time there appears round these vessels a new tissue composed largely of fibroblasts. This tissue eventually encroaches on the alveolar bone, which is absorbed, with consequent widening of the tooth socket. The appearance described bears little relation to an inflammatory reaction, but is related

rather to a degenerative state. Traumatogenic occlusion is believed to be a potent factor in the production of this lesion. The existence of a "pericementitis fibrosa" is by no means universally accepted, but it occupies a large part of the teaching in the Canadian schools.

The rôle of traumatogenic occlusion in periodontal lesions has formed the subject of endless arguments, and the views held in Vienna and Toronto are diametrically opposite on this point. You must first realise that a tooth bearing the whole force of the bite in a certain position of the jaws is not necessarily in traumatogenic occlusion, since this is defined as "a condition such that the systems of forces acting on the tooth during occlusion are not in equilibrium." It follows that only when actual damage is caused to the supporting tissues by the occlusal force can the tooth be considered to be in traumatogenic occlusion. I think that Gottlieb's statement is generally accepted, that a tooth exposed to an excessive occlusal force will move away from that force till it is no longer operating. The histological picture in this condition is familiar, and consists of bone absorption by osteoclasts on the side towards which the tooth is moving, together with deposition of new "bundle bone" on the side from which the tooth has moved; it is, in fact, comparable with orthodontic tooth movement. It is equally clear that a tooth subjected to a traumatic force in one direction in one position of the jaws, and to a diametrically opposite traumatic force in another position of the jaws, will rapidly loosen and remain loose, since it is unable to move away from either force. This condition can easily be visualised in a tooth with cusps deeply locked with those of its opponent. It is thus clear that traumatogenic occlusion is capable of producing tooth-loosening, but tooth-loosening alone does not constitute pyorrhœa, and the controversy rages rather over the effect of traumatogenic occlusion on the descent of the epithelial attachment, and hence of pocket formation. If the affected tooth were loosened to such an extent that there was actual rupture of the periodontal membrane beneath the epithelial attachment, it would be reasonable to suppose that the space so created might be filled by downgrowing epithelium. It is in cases in which the condition of affairs is not so gross that the argument is most heated. There is conflicting experimental evidence on the point, Gottlieb and Orban, as a result of a large series of experiments in which the teeth of dogs were exposed to artificial traumatogenic occlusion, came to the conclusion that there is no relationship between occlusion and the downgrowth of the epithelial attachment, whereas in a much smaller series using sheep, Box obtained reverse results, as did Stones, also in a small series with monkeys as the experimental animals. Gottlieb thus considers that traumatogenic occlusion is not a causal factor in pocket formation, whereas Box believes not only that it is a very potent factor, but that summation of a series of subclinical stimuli will eventually cause vascular changes in the periodontium with subsequent tooth-loosening and pocket formation. The argument between the two schools has every appearance of being prolonged indefinitely.

The methods of treatment in Toronto included all those which are in use in Vienna together with two or three additions, mostly aimed at the removal of traumatogenic occlusion. Systematic grinding of the cusps of the teeth in order to distribute the bite over as many teeth as is reasonably possible in all positions of the jaws is practised as a routine. The mechanical efficiency of the denture is of necessity increased after such treatment, and teeth showing evidence of strain certainly tighten, but I am as yet unprepared to express an opinion on the effect of pocket formation, since, in the cases presenting pockets, other conditions existing, such as the presence of tartar, were treated simultaneously, and these might equally have been a causal factor. The balancing of the occlusion is practised as a prophylactic measure in Canada, and here again I am undecided whether this is entirely justifiable, but in many cases the mechanical advantage the patient gains from an enlarged distribution of the bite is very real and is an ample justification for the procedure.

It is worth noting that definite tooth-tightening may sometimes be obtained by the grinding flat of the tooth cusps, even though a balanced occlusion may not be obtainable, since by this process the horizontal (or tilting) component of the occlusal force is diminished at the expense of the vertical component, which is more evenly borne by the supporting structures. Indeed, an edge-to-edge bite is mechanically the most satisfactory, from the point of view of tooth stability.

In cases presenting a gross incisal overbite no amount of tooth grinding will diminish the tilting force, and it is the practice of some workers permanently to open the bite either by the construction of a series of high inlays or by the use of an overlay covering the crowns of the posterior teeth, a kind of permanent bite pad. This treatment fails in its object if it does not create an edge-to-edge bite in the incisor region, a result demanding very great opening of the bite in some cases, and in view of this one was surprised to hear the number of patients praising this type of appliance. In actual fact the result is not only

the opening of the bite with a consequent diminution of tilting force in the incisor region, but also the splinting together of the posterior teeth.

The other method of treatment described, though rarely practised in Toronto, is the attempt to induce reattachment of the soft tissue wall of a pocket to the cementum wall. Gingivectomy is a sure way of obliterating pyorrhœa pockets, but the result in the front of the mouth is not always all that could be desired from an æsthetic viewpoint. True reattachment can only occur by the formation of new cementum on the surface of the old, into which fibres of the periodontal membrane are inserted. This is in theory possible, even when the cementum has been exposed to the mouth, since this is the method of reattachment in tooth replantation, and even when the cementum has suffered infection and local death, since this happens after successful root therapy in cases of periapical infection. The operation consists in curetting the exposed cementum and in removal of the epithelium lining the soft tissue wall of the pocket, the blood clot which then fills the pocket is sealed off from the mouth by a varnish. In practice, even in carefully selected cases, it is so difficult to prevent infection of this blood clot that the method is one to be described rather than attempted. Some cases have been successfully treated in this way, but as a routine procedure it holds no place.

I had intended to finish off this paper with further travel stories as a final coating for the dental pill, but it seems to be becoming long enough to be in danger of over-dosage, so they must remain untold.

Before finishing, let me stress the following points. Many paraodontal lesions can be successfully treated by the dental surgeon, and it is the early case, the type you see in the Conservation Room, the type with slightly reddened gum margins, or slight festooning, which is as important as the later cases which tend to collect together in the Paraodontal Clinics, and which have sometimes progressed so far that extraction is the only course of treatment possible. I am well aware that some patients are not interested in the state of their gums, but it is your duty to preach tactfully at them (call it " suggestion " if you like) till they do become interested. If after all your efforts they are still not interested, it is not your fault when the teeth are extracted, and the patient has thenceforth to limp at the meal table on his wooden legs of artificial dentures.

Finally, I think it is fair to say that as many teeth are lost through pyorrhœa as through caries. With this in mind, compare the small amount of time you spend at paraodontal work in your student career with the amount of time spent at other branches of dentistry (and the same conditions hold in all hospitals I have visited). I leave you to draw your own conclusions.

Reviews

Modern Treatment in General Practice—Volume III. Edited by CECIL P. G. WAKELEY, D.Sc., F.R.C.S., F.R.S.E. Published by Messrs. Baillière, Tindall & Cox. Pp. 436. *Price* 10*s.* 6*d.*

THAT all business men are tired seems to have been established beyond all doubt, and it is automatically concluded that his hours away from the office must be filled with pleasurable luxury, and that his reading—if any is embarked upon—should be of almost childlike simplicity seems essential.

It is presumably for this reason that the enormous number of prècis, or digests as they are called in America, have appeared, until now, when apparently very little of anybody's work is ever read in its original or undigested form. All this is a rather regrettable habit, but, like all habits which tend to encourage idleness or an easy philosophy, it is bound to spread, and now the general practitioner, who is evidently and eagerly seized upon as the tired business man of the medical profession, is getting his share of digests and prècis and all the potted paraphenalia that publishers can muster.

This book is one of them, and not a very good one at that. Like the preceding volumes of the series, it consists of a number of articles upon the most varied subjects, each written by an eminent consultant, and each, as far as it goes, is no doubt an excellent outline of its author's practice of treatment, but how far many of these articles can be of any practical help to the general practitioner is doubtful.

For example, the book starts with an essay on the surgical treatment of carcinoma of the stomach, by Mr. Gordon Taylor, in which he expresses some disappointment that the end results of surgical treatment in this country are so bad ; a little mild envy that they are apparently better in other countries, and a general regret that the majority of cases of this most distressing malady are already inoperable when they first reach the surgeons.

Of course, the early diagnosis of stomach

carcinoma is vitally important, and it would have been most welcome to see an up-to-date review of the signs, symptoms and clinical findings of an early case, but surely it would be hard to find any subject more widely removed from general practice than the surgical treatment of such growths. That article seems completely useless to the class of people for whom the book is written, and there are others just as bad.

However, though it is difficult to recommend the book as a whole to anyone, there are parts of it which are undoubtedly good. Such articles as the treatment of infantile paralysis, by Dr. Rocyn Jones, the treatment of œdema, by Dr. Wilkinson, and the value of blood examination in medical practice, by Dr. H. Letherby Tidy (by some oversight he appears as Dr. Tily, or is this someone else?), are of very great help and could be read with advantage by any practitioner, but as a whole the book disappointed me and I am at a loss to understand its eulogies in other journals.

A. H.

Correspondence

The Broadcast Appeal

To the Editor of the GAZETTE

SIR,—May I, through the medium of the *Gazette*, express my thanks to the very many Guy's doctors and nurses who have written to congratulate or encourage me on the occasion of the Broadcast Appeal for Guy's? Their letters warmed my heart, and those that came before the Appeal certainly helped me on my thorny way. I appreciate them all.

Yours, etc.,

EMILY E. MACMANUS,
Matron.

Guy's Hospital,
S.E.1.

Sport

Rugby

Guy's v. Richmond

(*At Honor Oak Park on Saturday, December 3rd*)

THE visit of Richmond attracted one of the largest attendances of the season, and after a grand match Guy's were defeated by a placed goal and 3 tries (14 points) to a placed goal, a dropped goal and a try (12 points).

This was a magnificently exciting game, full of open play, fine forward work, defence almost eschewed and with every man on his toes and playing as if inspired.

Guy's were unlucky not to win; their play in the second half was beyond praise, and had Hanson had better luck in following up a kick—the ball bounced back over his head—a certain try would have been scored, and this would have put the Hospital ahead by one point.

Babrow played his best game since he came to Guy's, and his enthusiasm was communicated to the rest of the side, who, ten points down at half-time, scored a goal and a try immediately afterwards, and shared the honours of a thrilling and gruelling game.

Richmond took the Hospital by surprise in the first minute, when Yandell caught the defence napping for a second and he touched down for an unconverted try.

Guy's fought back magnificently, but a little later Dawkins ran clean through and scored another try, which was not converted.

After this, the game swung from one end of the field to the other, each side attacking in turn, but on each occasion the defence prevailed.

However, Richmond increased their lead following a good movement which started near their own 25. Northcote-Green played a big part in this effort and, in a glorious bout of passing between the forwards, bewildering at times, he gave the final pass to Grose, who scored near the corner flag.

This reverse urged Guy's to greater efforts and, after pressing the visitors in their 25, Kolesar collected a weak clearance and, without hesitation, dropped a splendid goal from thirty yards' range.

Just when Guy's appeared to be holding the upper hand, Warr, the former Oxford Blue, broke away and, after a dazzling zig-zag run, scored another try for Richmond, which Squire converted.

After the interval Guy's played like an inspired side, and a movement started by Steytler which was carried on by Babrow resulted in a try by Crawford.

The game had scarcely restarted when again Steytler carved out an opening for Babrow, who raced through a surprised defence and scored near the posts for Kynaston to add the goal points. It was a spectacular try, and it was quick thinking on Babrow's part that put him in the right place to take Steytler's inside pass.

Guy's were now only two points short of their opponents' score, and the rest of the game was one whirl of excitement, with the ball going from end to end and both sides eager to turn defence into attack.

Hanson made two thrilling runs on the left wing for Guy's, but in the first he was overtaken by Cornish a few yards from the line, and a little later he had very bad luck when he attempted to gather a punt ahead, but the ball bounced too high.

The Hospital forwards under the leadership of P. D'O. Kolesar, touched great heights—Wiggins, Vidot, Bulstrode and Renton (especially the latter) doing grand work.

But so good were all that nobody can be criticised. Babrow and Van Steytler had a splendid understanding, and the former's tackling and positioning for passes was wonderful.

In the closing minutes each line had several hair-raising escapes, and, though there was no more scoring, few better finishes will be seen this season.

Team.—R. U. F. Kynaston; J. M. Hanson, J. S. Breen-Turner, L. Babrow (captain), J. P. Crawford; J. van A. Steytler, J. W. Lewis; D. N. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, J. R. D. Williams, T. W. Renton, P. D'O. Kolesar, A. E. M. Wiggins.

Guy's v. The Army

(*At Honor Oak Park on Saturday, December 10th*)

ANOTHER splendid match was seen at Honor Oak Park, where Guy's had the honour of receiving the Army in the first of their representative games. Although the Hospital lost by a placed goal and 3 tries (14 points) to nil, they were by no means disgraced.

The forwards, under the inspiration of Fletcher, Wiggins and Renton, stood up to the heavy Army pack with commendable determination, and, although the Hospital outsides were given few attacking chances, they were certainly given every opportunity in defence to prove their worth.

The thrust and speed of the Army back division made the Hospital line look slow in comparison, but, although Guy's were unable to mount an attack comparable with that of their opponents, they gave a great display of fearless tackling at which all the backs excelled.

Babrow was the best man on the field until an accidental kick on the temple knocked him out a few minutes before the interval. He insisted on returning after the interval, but was obviously shaken by his injury.

The ground was very heavy and one anticipated a forward struggle. However, the backs, whose handling of a slippery ball was excellent, stedfastly refused to be left out of the game, and the play was fast and open.

Leyland, in one of his most elusive moods, caused the Hospital mid-field defence a good deal of trouble, and it was he who eventually made an opening for Rice to score the first try.

P. D'O. Kolesar charged down Sayers' kick at goal, and although Leyland did again manage to cut through, Guy's this time had covered the gap, and until half-time their defence stood firm.

Having weathered the attacks of Rice, Unwin and Leyland, the Hospital took the offensive and were pressing the Army when Babrow, in tackling Grieve, the visitors' fullback, met with an accident and had to be assisted from the field.

Whilst he was away the Army scored again, when Rice broke through the centre, drew the back beautifully, and gave Leyland a clear run in.

Soon after the interval Babrow returned, but he was not nearly so effective and Guy's were kept mainly on the defensive.

The powerful Rice-Leyland combination again made itself felt and another cut through led to a try by Unwin and Tarrant added the goal points with an excellent kick from near the touch-line.

Guy's made desperate efforts to find an opening, and came within an ace of scoring on two or three occasions. However, towards the end Rice made another burst through the centre, and finally gave Unwin a perfect pass, who scored a try too far out for Tarrant to convert.

Team.—R. U. F. Kynaston; J. M. Hanson, J. S. Breen-Turner, L. Babrow (captain), J. P. Crawford; J. van A. Steytler, C. Halamandres; D. N. Fuller, H. F. Osmond, C. C. Vidot, P. Fletcher, J. C. Bulstrode, A. E. M. Wiggins, T. W. Renton, P. D'O. Kolesar.

Guy's v. Catford Bridge

(*At Honor Oak Park on Saturday, December 17th*)

OUR old friends Catford Bridge paid their second visit to Guy's and sprung a big surprise when they won by 2 placed goals and 2 tries (16 points) to a try (3 points).

The visitors had a much stronger side than when they met the Hospital earlier in the season, and their three-quarter line, composed mainly of New Zealanders, were very fast and excellent tacklers.

During the first half, Guy's had to face a bitterly cold wind and their backs found it difficult to hold the ball. In the first minute they punted the ball over the line, and Hanson just failed to secure the touch-down. The Hospital continued to force the pace, and the visitors were compelled to defend their goal-line.

Twice in quick succession Catford Bridge touched down, and then a grand movement between Babrow, Steytler and Breen-Turner nearly led to a try.

At this stage it appeared as though Guy's would sweep their opponents off their feet, but, having weathered these early onslaughts, Catford's forwards fought back and in a grand dribble from their 25, they found touch only a few yards from the Hospital's line.

Against the run of play Catford took the lead. Following a five yards' scrum, Fraser obtained possession and was over the line before the Hospital had realised that the ball was out of the scrum. Cobden missed the kick at goal.

Guy's improved and gave Catford a worrying time, but their defence was excellent and gave nothing away.

Another breakaway led to Catford increasing their score; this time Hurdley kicked ahead and Mackrell, racing up at full speed, gathered the ball in his stride and rounded Kynaston for a try, which the same player converted.

Although Guy's had the advantage of the wind in the second half, they could make no impression on a cast-iron defence, in which Cobden, Pickmere and Mackrell were outstanding.

Steytler played a grand game for Guy's and was constantly trying to set his three-quarters moving, but somehow nothing would go right.

Catford played the correct game and never attempted any passing movements unless they were in a favourable position.

On one occasion Babrow intercepted in his own half and went right through on his own, but unfortunately no one was up to take the final pass, and he was brought down ten yards out.

Another breakaway enabled Catford to secure a footing in the Hospital's 25, and eventually C. James crossed for a try, which Cobden converted—his kick hit the upright and bounced the right side.

Guy's reduced the deficit as the result of a good try by Hanson, but just before time Mortimore crashed his way through a crowd of Hospital players and finally passed to James, who scored a try, which was not converted.

Catford made full use of their chances and fully deserved their success. The Hospital backs were better in attack, but many promising movements were frustrated by an excellent defence.

Team.—R. U. F. Kynaston; J. M. Hanson, L. Babrow (captain), J. S. Breen-Turner, J. P. Crawford; J. van A. Steytler, C. Halamandres; D. N. Fuller, H. F. Osmond, C. C. Vidot, P. Fletcher, T. W. Renton, J. R. D. Williams, J. C. Bulstrode, A. E. M. Wiggins.

Guy's v. Old Millhillians

(*At Headstone Lane on Saturday, December 31st.*)

GUY'S had difficulty in raising a full side for their fixture against the Old Boys, and when they arrived at the ground they found that they were still short of a centre. However, R. E. Luyt, the Oxford Blue, happened to be on the ground, and he kindly agreed to fill the vacancy.

The Old Millhillians are always a difficult side to beat on their own ground, and on this occasion better teamwork and greater skill enabled them to gain a comfortable victory by 2 placed goals and 2 dropped goals (18 points) to a placed goal (5 points).

In the early stages the Old Boys were definitely superior and their forwards dominated most of the scrums and were continuously hammering away at the Hospital line. The veteran Roger Spong, of English international fame, was the inspiration of his side, and proved himself just as elusive as ever.

Following one prolonged raid, Spong whipped out a pass to Knight, who flashed through the Hospital defence to score a try after a quarter of an hour's play, and Williams had no difficulty in converting.

A few minutes later the Millhillians were still attacking, and Williams, in the midst of a crowd of players, dropped an excellent goal.

For a short time Guy's carried play into their opponents' 25, but with no result.

After the interval Guy's improved and, ably led by Kolesar, the forwards, who had been sluggish during the first half, roused themselves and proved the equal of their opponents. Unfortunately Osmond received a nasty kick earlier in the game, and was not nearly so effective as usual.

A grand movement between Babrow, Luyt and Hanson was stopped in the nick of time by Bush, who played a splendid game at full-back for the Old Boys.

Guy's were sent back almost immediately and, following a loose scrum, Grimsdell received a grand pass from Spong, and like a flash went through the Hospital defence with not a hand being laid on him, for a fine try which Williams converted.

The Hospital made several spasmodic attempts to find an opening, and on one occasion Babrow slipped the defence, but, after running nearly half the length of the field, found himself unsupported and a certain try was thrown away.

However, a little later Babrow carved out a magnificent opening for Luyt, who scored near the posts for Kynaston to add the goal points.

It was one of the best tries seen this season. Babrow started the movement well inside the Hospital half and, after side-stepping at least four defenders, raced through at an incredible speed and finally passed to Luyt, who left the full-back standing.

Thus encouraged, Guy's tried to break down a good defence, and in the last minute Hanson dribbled through in great style and with only the fullback to beat, he tried to pick up instead of kicking ahead, and the Old Boys got back and saved near the corner flag.

Team.—R. U. F. Kynaston; J. M. Hanson, R. E. Luyt, P. H. Birks, A. B. Baxter; L. Babrow (captain), T. H. Eustace; D. N. Fuller, C. C, Vidot, H. F. Osmond, J. R. D. Williams, J. C. Bulstrode, A. E. M. Wiggins, T. W. Renton, P. D'O. Kolesar.

Hockey

The record of the 1st XI to 9th December, 1938, is: Played, 15; won, 9; drawn, 1; lost, 5; goals for, 65; goals against, 41.

This record may not seem quite so good as the record at a corresponding time last year, and this is due to the fact that, while this year we have a better team, it has been difficult to play it often on account of examinations, appointments and injuries. Consequently it has been necessary to play almost an "A" team on occasion, and in such circumstances it may be realised that some of the results given below do not really indicate our team strength.

The most enjoyable and best matches have been against the South Saxons, Aldershot Command and Shoeburyness Garrison. We may count ourselves unlucky in losing to Aldershot Command, after pulling up from 0—3 to 3—3. The opportunism of the opposing centre-forward proved our undoing, and we lost by three goals to five. The South Saxons came up to London with an unbeaten record of two seasons' standing, and, unfortunately, went away with it intact. The score was only 1—0 until a few minutes from the end, and we might easily have snatched a draw. This is always one of the best games of the year, and the game this season was no exception. On an excellent ground at Shoeburyness, the Garrison gave us a really enjoyable match, which we finally won by three goals to two, after a most thrilling second half. This was a rehearsal to our Cup Tie against St. Thomas's, an account of which appears elsewhere, which we won by three goals to two.

Results.—

September 28th, *v.* High Wycombe, home, won 12—0.

October 1st, *v.* South Saxons, home, lost 0—3.

October 12th, *v.* Gravesend, home, won 4—0.

October 19th, *v.* Reading University, away, won 6—3.

October 22nd, *v.* Bank of England, away, draw 4—4.

October 24th, *v,* Westminster Hospital, home, lost 2—3.

October 29th, *v.* Northampton, away, lost 2—6.

November 5th, *v.* Nore Command, home, won 5—3.

November 9th, *v.* Aldershot Command, home, lost 3—5.

November 12th, *v.* West Herts., away, lost 3—5.

November 19th, *v.* Tulse Hill 3rd, home, won 4—2.

November 23rd, *v.* R.N.C., Greenwich, home, won 1—0.

December 3rd, *v.* London Hospital, home, won 13—3.

December 7th, *v.* Shoeburyness Garrison, away, won 3—2.

December 9th, *v.* St. Thomas's Hospital (Cup), away, won 3—2.

Goals have been scored by E. J. Martin (33), R. C. Hart (9), S. G. McCallin (8), F. Butterfield (5), F. R. Buckler (3), J. B. Franklin, — Goodhart and J. A. L. Leeming (2), and D. A. Hamilton (1).

SENIOR CUP

GUY'S *v.* ST. THOMAS'S HOSPITAL

FOR seven years St. Thomas's have had the pleasure of beating Guy's in the Inter-Hospitals Tournament. This run of successes came to an end on Friday, December 9th, at Chiswick, when Guy's fully merited a victory by 3 goals to 2. The match was, as is usual in games between these two hospitals, very close from start to finish, played with tremendous keenness throughout, the second half particularly being amazingly fast. The ground was in excellent condition, and the St. Thomas's captain, winning the toss, decided to play with the wind down the slight slope.

Guy's, as usual in these matches, started badly, and for the first few minutes our defence had plenty to do. St. Thomas's forced two corners, which were cleared, and play was taken to our opponents' goal, where the goalkeeper had several dangerous moments. Leeming hit slightly wide from a penalty corner, and Franklin was unlucky to be injured when nearly through. This injury to his thumb prevented him from being as effective as he usually is, for the rest of the game, and hence handicapped us on the left. Following a shot by Hart, which was only just wide, Guy-Wallace broke away on the right wing for St. Thomas's, passed Buck and Thorne like a flash, and with a tremendous shot from the right of the circle, put St. Thomas's one goal up.

Guy's again attacked after the re-start, but the forwards were not well together, the passing being too hurried and not very accurate, so that the opposing defence had the upper hand. The St. Thomas's forwards, on the other hand, however, were very dangerous, and with Buck not quite holding Guy-Wallace, were constantly making ground on the right. It was from a centre from the right that the St. Thomas's centre forward scored another goal to put St. Thomas's two up. The remainder of the first half was even, with St. Thomas's more dangerous in front of goal, and hence half-time came with Guy's two goals down. St. Thomas's had much the better of the play in this half, the Guy's forwards being too slow and not well together, and the defence a little shaky.

Even Guy's staunchest supporter could not have hoped for a revival greater than that which took place in the second half. Never has the writer seen a Guy's team play with such spirit and so keenly. Passes were made quickly and accurately, a tremendous pace was kept up, and from the whistle Guy's dictated play. Within a minute Martin had shot inches past the post with the goalkeeper beaten. Within two minutes Hart had skimmed the post, and within four minutes the St. Thomas's goalkeeper, on the ground, watched the ball fly round the post from our centre-forward.

Guy's continued to attack and, following ten minutes of non-stop pressure, Leeming scored from a short corner, flicking past the goalkeeper after the first shot had been saved.

Straight from the bully Guy's were back in the St. Thomas's goal-mouth, and, following a short corner, Martin equalised, following up Leeming's shot. This was after thirteen minutes, during which time St. Thomas's had attacked twice and had not been dangerous.

The winning goal was scored after twenty-two minutes by Hart, with a fast ground shot from the right of the circle. This followed a period of intensified Guy's pressure, during which two corners were forced, and it was only deserving.

St. Thomas's, after this, attacked more, following rearrangement in their forward line, and were dangerous on more than one occasion—never, however, looking like scoring. We attacked hard just prior to the final whistle, and Locke, in the St. Thomas's goal, brought off a remarkable save from Martin, who hit a centre from Roberts hard and high towards the left of the goal. Goodhart, coming in from the right, narrowly missed with a powerful cross shot in the last minute. Thus the final whistle went with Guy's the winners by three goals to two.

A feature of the second half was the way in which Buck held Guy-Wallace, who was responsible for the two goals against us in the first half. Much of the ineffectiveness of the St. Thomas's forwards was due to Guy-Wallace being unable to get away. Our backs played brilliantly in the second half, while Leeming and Roberts not only excelled in defence, but fed the forwards excellently. Leeming's well-placed passes down the middle to Hart, who distributed well to both right and left, were instrumental in starting many attacks. The forwards, ineffective in the first half, were dangerous the whole time in the second, and played well together.

Captain Ross, who was umpiring, said after the

match that he had never seen the form of a team change so much from one half to the other, and this may be attributed to the keenness and spirit in the team, determined to win when well down at half-time. We have only to keep up this second-half form to win the Cup. On that form we are convinced no other hospital can beat us. See to it, Guy's, that this is so!

Team.—E. J. A. Needham; J. S. Astbury, T. C. Thorne; D. G. E. Roberts, J. A. L. Leeming, H. A. Buck; — Goodhart, R. C. Hart, E. J. Martin (captain), S. G. McCallin, J. B. Franklin.

Hospital Information, etc.

Notices

We would remind our readers that the annual subscription to the *Gazette* and *Directory of Guy's Men* (12*s.* 6*d.*, post free) is now due, and should be forwarded to the Manager, The *Gazette* Office, Guy's Hospital, S.E.1.

MEDICAL SCHOOL

A Course in preparation for the Final F.R.C.S. Examination in May will be held at this School, beginning on 20th February.

Guy's men wishing to join the course should give in their names at the Medical School Office as soon as possible as the number of vacancies is limited.

T. J. EVANS,
Dean.

DENTAL SOCIETY DINNER

The Annual Dinner of Guy's Hospital Dental Society will be held on Saturday, March 4th, at the Grosvenor House Hotel. On the same day, a Clinical Meeting will be held in the Dental Department of the Hospital and the provisional programme is as follows:—

Morning Session .. 10.30 a.m. to 12.30 p.m.
Afternoon Session .. 2.30 p.m. to 4.30 p.m.

Clinical Cases will be shown by Members of the Dental Staff.

Orthodontic Cases and Appliances will be shown by Mr. F. Bocquet Bull, Mr. R. E. Rix and the Registrars in the Children's Department.

Prosthetic Cases will be shown by Professor H. B. Fenn and the Demonstrators in the Prosthetic Department.

Paraodontal Cases will be shown by Mr. F. S. Warner and Demonstrators.

The following Demonstrations will be given: Surgical removal of teeth under local anæsthesia, Mr. F. N. Doubleday; Histology, Mr. G. B. Pritchard; Extractions under general anæsthesia, Mr. W. Kelsey Fry; Administration of continuous nasal nitrous oxide, gas and oxygen, Mr. A. D. Marston; An every-day clinic, Mr. A. Bulleid; The removal of a dental cyst under general anæsthesia, Mr. H. L. Messenger (Anæsthetist, Mr. E. H. Rink); The alkalinisation of stock local anæsthetic solution, Mr. K. Hooper; Museum specimens, Mr. M. A. Rushton; X-rays showing representative pathological conditions, Mr. H. M. Worth (Mr. Worth invites old Guy's men to bring to the meeting their own radiographic problems for discussion); Speech training, Mr. H. St. John Rumsey; Balanced occlusion, Professor H. B. Fenn; Root resections, Professor W. E. Herbert; Porcelain jacket crowns, Mr. A. R. F. Thompson; Transference of oral records to Guy's articulator, Mr. H. C. Davis; Plaster impressions, Mr. G. H. Ellingham; Oral records, Mr. C. S. Henderson; Tooth carving and its applications, Mr. R. O. Holland; Amalgam fillings, Mr. F. L. Ingram; Partial denture design, Mr. J. W. Mansie; Gold inlays—methods, examples and stages of the technique, Mr. G. J. Parfitt; Electrical deposition of copper, Mr. A. E. Parrott; A palliative method of dealing with caries involving the pulp, Mr. C. S. Pitt; Adjuncts to paraodontal treatment, Mr. R. F. Pusey; Fifty cases of collapse of the bite, Mr. K. E. Pringle; Porcelain inlays, Mr. W. A. Vale; Dentocoll impressions, Mr. R. J. Wheatley.

Tea will be served at 4.30 p.m.

Pass List

UNIVERSITY OF LONDON.

M.S. EXAMINATION.

December, 1938.

BRANCH I.

Surgery.

J. A. Currie.

BRANCH III.

Ophthalmology.

H. W. Applin.

Papers by Guy's Men

Burgess, Norman. Unilateral swelling and erythema of the face. *Proc. Roy. Soc. Med.*, 1938, xxxii, 85 (Sect. Dermat.).

Forman, L. Kaposi's disease. *Ibid.*, 82.

Hickman, G. H. Dental jurisprudence. *Brit. Dent. J.*, 1939, lxvi, 71.

Pearson, R. S. Bruce. Purpura and angioneurotic œdema in a male, associated with hypertrophy of the breasts. *Proc. Roy. Soc. Med.*, 1938, xxxii, 78 (Clin. Sect.).

Slesinger, E. G. Auricular fibrillation and the thyroid. *Lancet*, 1939, i, 65.

Woods, S. H. An outline of dentistry in the British Army. *Proc. Roy. Soc. Med.*, 1938, xxxii, 99 (Sect. Hist. of Med.).

EDS. { C.H.E. / W.E.Y.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

IT is without alarm that we learn that the question of admitting female medical students to this Hospital is once again to be put under consideration. There are a few people whose opinion it is that this should be allowed, but it seems that they are in such a small minority that their beautiful dream has little chance of coming true, at least for some time to come. It is at times such as this that we have reason to be thankful for the conservative machinery that is Guy's, for we feel that we voice the sentiments of the majority when we say, without heat, that we do not want women to share our clinical studies here with us. It is not easy to say, without being unkind or frivolous, just why we feel this way; but then we all have so many firm beliefs on various matters that defy logical elucidation. Perhaps we dislike the idea because we have been unaccustomed to it here—not a logical reason, but a very potent one. The fact is that most of the people that we meet do not wish for clinical co-education, and if one asks them the reason for this there are only a few who will, seriously and without recourse to inanities, give good sound arguments against the scheme.

The advantages to be gained by allowing women students here are not obvious. We ourselves would presumably gain nothing at all, and that is always a little dampening to anybody's ardour for a cause. It might be argued that to allow them to study here would give them the benefits of a system of medical education that they are at present disallowed, but we presume that those institutions that cater for female students are in every way satisfactory, although they perhaps do not think along the same lines as we do here. If the facilities for their training are not sufficient for the numbers it would be comparatively easy, and incidentally in their own interests, to limit the female entries into the profession. There is, so far as we know, no evidence to show that a mixed training is a better training or even that either sex desires to be co-educated. Although we are not articulate about the problem, are we agreed that we do not want women students at Guy's? We trust that those who favour the scheme cannot be contemplating adding to the numbers of people taking clinical studies here, for that really would be unthinkable and would give us ample and logical grounds for complaint. As we say, however, we are not alarmed for we do not foresee ourselves vying with women for appointments for many a long year. We hope.

WE regret to announce the death of Dr. Noel Dean Bardswell, M.V.O., F.R.C.P., at the age of sixty-six. Dr. Bardswell, who was educated at Edinburgh University and this Hospital, had been Medical Commissioner for Tuberculosis in Cyprus since 1936, before that being Principal Assistant Medical Officer of the Public Health Department of the L.C.C. For twelve years he had been Medical Superintendent of the King Edward VIIth Sanatorium at Midhurst, resigning in 1917, and was also a member of the Departmental Committee on Tuberculosis. During the war he served in the R.A.M.C. He married in 1917 Miss Monica Mack and leaves two sons and two daughters.

We regret to announce also the death of two other old Guy's men: Dr. E. N. C. Annis, who qualified L.M.S.S.A. in 1923 and practised for a number of years in Catford and later in Worthing, and who leaves a widow and three children, and

Dr. Charles Harold Brangwin, who has been practising in China. He qualified L.R.C.P., M.R.C.S. in 1900, and L.D.S., R.C.S. in 1909.

A SHORT memorial service to Mr. Joseph Lewin Payne was held in the Chapel on Tuesday, February 7th, when many of his friends here honoured the memory of a well-beloved old Guy's man who had served this Hospital so well during his lifetime. His obituary is written elsewhere by an old friend of his whose pen is better equipped than ours to do credit to a man who we never had the privilege of knowing.

THE number of replies to "What Do You Suggest? No. 1" has been so great that the task of selecting the best entry will have to be continued long after we go to press. We trust that we shall be able to publish the result in the next issue of the *Gazette*. May we ask that solutions to No. 2 of this series should be sent in an envelope with the words "What Do You Suggest?" written on the top left-hand corner.

WE congratulate the Guy's team on winning the United Hospitals' Boxing Club Challenge Cup for the first time since 1923 after a truly excellent display. It is a rich reward for much hard work and training, and we thank the whole team for bringing another cup to adorn our shelves.

Obituary

JOSEPH LEWIN PAYNE, O.B.E., M.R.C.S., L.R.C.P., L.D.S.Eng.

J. L. PAYNE, who died suddenly at 48, Portland Place, W.1, on 31st January, 1939, at the age of 66, will be greatly missed and mourned, not only in the dental world, but also in the many spheres in which he worked.

He was the youngest son of Mr. W. M. Payne, of the Chamberlain Office,'s Guildhall, and was educated at the City of London School. He was married in 1900 to May Castine Derry, youngest daughter of Mr. C. J. D. Derry, of Beulah Hill.

He entered Guy's Hospital as a student in 1893, and after taking his L.D.S. in 1895 he was at once elected to the Junior Staff of the Dental School. He took his M.R.C.S., L.R.C.P. in 1899 and remained on the teaching Staff of the Dental School until 1931, when he was made a member of the Consulting Staff of the Hospital. His valuable teaching during all that time was always much appreciated.

J. L. Payne had a multiplicity of interests, although he always had Guy's mostly at heart, and he occupied many important positions in the dental world. He was a Past President of the Metropolitan Branch of the British Dental Association, and also of that same body was a member of the Representative Board and on the Museum and Library Committee and the Advisory Committee on Research. He was also a Past President of the Odontological Section of the Royal Society of Medicine, and he served on countless committees, of many of which he was Chairman. For ten years he was a member of the Board of Examiners in Dental Surgery of the Royal College of Surgeons, and also was an External Examiner in Dental Surgery to Leeds University. He was a member of the Board of Studies in Dentistry of London University, and was largely responsible for the formation and drawing up of the curriculum of the B.D.S. Degree.

Among other bodies he served on were the Council of the Medical Defence Union, the Committee of the Empire Rheumatism Clinic, the Committee of the People's League of Health, and the Committee of the Metropolitan Convalescent Home.

Outside the medical and dental worlds he was interested greatly in many social and religious works. He worked for many years for the Field Lane Institute for Ragged Schools of Clerkenwell and was an Elder of the Marylebone Presbyterian Church. He was a co-founder of the Herne Bay Library and Museum, near where he had a country house for many years, and was a Past President of the Kent Bee-keepers' Association.

During the Great War he served on several auxiliary military hospitals for jaw and facial injuries, and for which work he received the O.B.E. For the last year or two he had been assisting Sir Frank Colyer at the Odontological Museum of the Royal College of Surgeons in classifying, arranging and cataloguing the Section of Fishes.

In his younger days J. L. Payne was a keen sportsman and was a prominent member of the famous Guy's Water Polo team in the late nineties, which beat all comers. Also he was no mean hockey player, and played a good hard game of tennis up till quite recently.

"J. L." was a man of vast ability, energy and integrity. The writer has had the pleasure of serving on many committees with him over the past thirty years, and one can safely say that his opinions were always sound and helpful, and he had the knack of saying the right thing at the right

time. His record alone signifies how and why his opinion was so frequently requested. He never spared himself.

He not only imparted knowledge to others so willingly, but was always keen to seek knowledge at all times. Even on holiday, it was almost a religion with him to see and understand everything there was to be seen within his reach.

With all this, his demeanour was ever quiet, unassuming and that of a true Christian gentleman. He had the true conviction that he should, and did, serve his Maker and his fellow man as each would wish. In private life he was a true friend and delightful companion, and much of his generosity we shall never know.

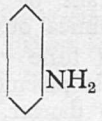
He was laid to rest in the pretty little cemetery of St. Mary's Church, Reculver, high up on the cliffs of Kent—a most peaceful spot.

E. B. D.

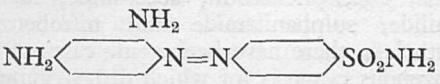
Modern Therapeutics

A Clinical Lecture delivered at Guy's Hospital, December, 1938, by Dr. A. H. Douthwaite

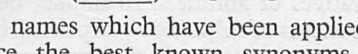
GENTLEMEN,—The advent of chemotherapy as an effective attack on bacterial disease heralds a new epoch in therapeutics the importance of which cannot be over estimated. The origin of the discovery can be traced to the last century when the parent substance Aniline



was produced. Of its vast number of dye derivatives Prontosil emerged amongst others as a substance having a remedial action in hæmolytic streptococcal infection. It was at first thought that the azo-linkage (—N : N—) as well as the sulphonamide group (SO_2NH_2) was essential for the bactericidal action; thus the structural formula of Prontosil is :—

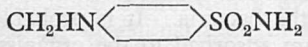


By great good fortune, however, the restrictive German patents were circumvented by the action of the human body, which broke down Prontosil to a simpler substance free from azo-linkage but still containing the sulphonamide group, *i.e.*, p-aminobenzenesulphonamide, which is the sulphanilamide with which you are familiar :—

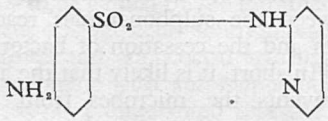


Of the many names which have been applied to this substance the best known synonyms are Prontosil Album, Sulphonamide-P, Colsulanyde, Prontylin, and Streptocide. Prontosil is insoluble; Prontosil Soluble is a sodium derivative sufficiently soluble for administration by injection. Sulphanilamide is soluble to the extent of 0.8 per cent. in cold water and cannot therefore be given adequately by injection.

Two other important sulphonamides must still be mentioned, namely, Proseptasine (and its soluble sodium derivative Soluseptasine) and Sulphanilylaminopyridine, *i.e.*, M. & B. 693. The first is a benzyl derivative of sulphanilamide :—



The structural formula for M. & B. 693 is ;—



It will be seen that it differs from sulphanilamide in that one hydrogen atom of the SO_2NH_2 group is replaced by a basic pyridine group. This, as I shall tell you, appears to confer on it its astonishing multiple bactericidal properties. M. & B. 693 is also insoluble, but suspensions suitable for injection can be obtained.

Dosage of Sulphonamides.—For Prontosil, Sulphanilamide and Proseptasine the total is 2 to 5 grammes in 24 hours given in divided doses four-hourly. Most of the preparations are made in 0.5 gramme tablets, *i.e.*, $7\frac{1}{2}$ grains.

M. & B. 693.—The suggested dosage is 2 grammes repeated in four hours; thereafter 1 gramme four-hourly for 36 hours; subsequently 0.5 gramme four-hourly for one day and thrice daily on the next day. All these preparations should be given for two to three days after the temperature has returned to normal, otherwise the pyrexia may flare up again.

ACTION

All the above-mentioned drugs combat certain bacterial infections. Prontosil was first introduced as a bactericide acting on the hæmolytic streptococcus. It has been shown by animal and subsequently by clinical experiments to be highly effective in this aim. It soon appeared that the simpler p-aminobenzenesulphonamide (sulphanil-

amide) was almost equally effective. The action of Prontosil is not entirely due to it, however, for weight for weight Prontosil is more active than sulphanilamide. Prontosil is not active *in vitro* against the streptococcus, but sulphanilamide is effective in arresting growth.

The drugs of this group also retard the growth of, or destroy, meningococci, gonococci and *Bacillus coli communis*.

M. & B. 693 makes a further advance in that not only is it effective against all the above-mentioned organisms, but also it is lethal to pneumococci and the *Staphylococcus aureus*; it has some retarding influence on *Streptococcus viridans*.

The exact mode of action of these drugs in combating bacterial infections is not fully understood. It is known that they do not damage nor stimulate the leucocytes in the circulation, and they do cause degenerative changes in the protective capsules of the bacteria. It is probable that the substances are adsorbed to the organisms, a fact which will account for an invariable lag of several hours between the sulphonamides reaching the bloodstream and the cessation of bacterial multiplication. In short, it is likely that the adsorption process prevents the microbes from obtaining nutriment necessary to their multiplication, rather than that the drugs are proplasmic poisons.

Proseptasine and Soluseptasine are less toxic than sulphanilamide to animals and man. Experimentally they are equally effective against streptococcal infections, but inactive against the meningococcus. A recent experience of mine with a case of acute cerebro-spinal fever with positive blood culture was that Soluseptasine was ineffective, but M. & B. 693 dramatically potent. The action of these compounds is not due to reduction to sulphanilamide.

TOXIC EFFECTS OF THE SULPHONAMIDES

Certain toxic effects, usually but not always the result of prolonged administration, may arise during or soon after sulphanilamide treatment. These are nausea, colicky abdominal pain, morbilliform and maculo-papular rashes, pyrexia, acidosis, hæmolytic anæmia, methæmoglobinæmia, sulphæmoglobinæmia and agranulocytosis. The rise of temperature occasioned by the use of the drug, though rare, is apt to be confusing when it occurs in that it may suggest a relapse of the disease under treatment.

Methæmoglobinæmia and sulphæmoglobinæmia arise quite often during treatment, and are responsible for the cyanosis which may develop rapidly and to a considerable degree. It is suggested that it is methæmoglobin, which is the true toxic product of the sulphonamides. It should be noted that :—

1. Administration of magnesium sulphate simultaneously with, or within two or three days preceding, administration of sulphanilamide gives rise, in most persons, to sulphæmoglobinæmia. The formation of sulphæmoglobin takes place very rapidly even after small doses of the drug.

2. In the absence of purgatives large doses of the drug are well tolerated, but in a considerable proportion of persons doses of 5 to 10 grammes per diem result in methæmoglobinæmia. Some patients may have an increased susceptibility.

3. The removal of sulphæmoglobin from the blood is much slower than removal of methæmoglobin. The former has been detected six weeks after administration of sulphanilamide ceased. The latter disappears in approximately twenty-four hours.

4. Spectroscopic examination of the blood is a more delicate means of detecting sulphæmoglobinæmia than clinical observation of cyanosis.

5. Oxygen is of little value in treatment of severe cases of sulphæmoglobinæmia. If the patient's life is in danger, blood transfusion is indicated. In methæmoglobinæmia, oxygen appears to be of value.

The mechanism of the production of sulphæmoglobin is of great interest. The majority of cases formerly spoken of as enterogenous cyanosis, *i.e.*, that form which is due to methæmo- or sulphæmoglobin, were associated with prolonged or excessive ingestion of drugs derived from aniline or nitrobenzene, *e.g.*, phenacetin, acetanilide, methylacetanilide, sulphanilamide and nitrobenzene. Nevertheless, there have been some cases of true enterogenous cyanosis for which drugs cannot be incriminated. Exactly how methæmoglobin is formed is not known. Sulphæmoglobin is derived from the sulphide absorbed from the bowel. Thus phenacetin given to dogs may produce methæmoglobin; if given with sulphur, sulphæmoglobinæmia results. H_2S can react with hæmoglobin in the presence of oxygen, and the combination is accelerated or catalyzed by simple derivatives of aniline. In human beings either a gross excess of sulphide absorption from the bowel, or a normal amount in the presence of a catalyst will cause sulphæmoglobinæmia. Experiments *in vitro* have proved that sulphanilamide has such a catalytic action.

Saline cathartics particularly should be avoided as a purgative for sulphanilamide-treated patients. To produce watery evacuations is to increase microbial growth and unabsorbed food in the colon, and thus toxic absorption from the gut.

The saline purgatives are the worst in this respect, and thus favour H_2S formation, and indirectly sulphæmoglobinæmia. *The sulphur in the sulphate plays no part in this production. It would appear then that all cathartics are liable to produce the above blood changes in conjunction with sulphanilamide.* During treatment the patient should be on a low residue diet free from eggs (because of high sulphur content). Paraffin may be used as a lubricant, and a simple enema if needed. No phenacetin may be given during sulphanilamide medication. In general it may be accepted that the cyanosis caused by these blood changes suggests much more danger than really exists. Sulphæmoglobinæmia is the least desirable of the two products, and may be of danger to anæmic patients.

Agranulocytosis, or more often a polymorphonuclear leucopenia, may be caused by any of this group. Amidopyrine, phenacetin, certain gold salts and arsphenamine can produce agranylocytosis, and have in common the benzene ring with an attached amine group (NH_2), which increases the ease of oxidation. Sulphanilamide

qualifies for inclusion.

Experimental evidence suggests that the toxicity of M. & B. 693 is very low. It appears to have a greater tendency to produce vomiting than the rest of the group. This can be reduced by administration powdered in milk. Granulocytopenia following its use has, however, been noted. The question of relative toxicity has yet to be settled.

ABSORPTION AND EXCRETION

In animals, sulphanilamide and M. & B. 693 are rapidly absorbed and reach a maximum concentration in the blood in two hours. This has fallen to half the amount in five hours and complete excretion has occurred in 24 hours. The same degrees of concentration are reached in the cerebro-spinal fluid one hour later. In man, one gramme of M. & B. 693 given two-hourly for six doses produces a maximum concentration in the blood of 10 mgms. per 100 c.c. between the third and fourth hours after the first dose. It remains at 5 to 10 mgms. for 24 hours of treatment, then falls to zero in 12 hours. The cerebro-spinal fluid concentrations run parallel, but at half the value.

EXCRETION

All members of the group are excreted partly unchanged and partly as acetyl derivatives in the urine. Excretion commences in 45 minutes, and over 60 per cent. is eliminated in 24 hours.

THERAPEUTICS

All members of this group are used in cases of infections with hæmolytic streptococci. Thus dramatic recoveries have been effected in cases of erysipelas, meningitis, septicæmia, tonsillitis and Ludwig's angina, otitis media, streptococcal pneumonia and empyema, puerperal fever and various wound infections.

In order to obtain an effective concentration in the blood the daily dosage should be divided and administered four-hourly, including the night hours.

Meningococcal meningitis responds promptly to sulphanilamide administered by mouth. It reaches the cerebro-spinal fluid in high concentration (1 : 5,000), and it is doubtful whether anything is to be gained by the intrathecal injection of 10 c.c. of 0.8 per cent. solution.

Gonorrhœa and gonococcal arthritis are amenable to treatment with sulphanilamide and with M. & B. 693. I understand that the latter drug is in every way superior in this effect.

Pneumococcal pneumonia, peritonitis, meningitis and other infections with the pneumococcus may be rapidly eliminated by the use of M. & B. 693. Experimental evidence of its value in staphylococcal infections is plentiful; clinical reports are encouraging.

Bacillus coli infection of the urine responds, as a rule, well to the sulphonamides, and chronic cases may recover if this treatment be alternated with that with mandelic acid. The latter, unlike the former, is ineffective against *B. proteus*.

Claims for the use of sulphanilamide have been made in the treatment of filariasis, actinomycosis, typhoid fever, subacute bacterial endocarditis (M. & B. 693) and undulant fever. They have not as yet been established, however. I have recently seen full doses of M. & B. 693 given to a typhoid patient for five days. No effect upon the temperature or general condition was observed.

GOLD

The gold treatment of rheumatoid arthritis has established itself beyond any doubt. Eighty per cent. of patients thus treated are improved as the result. The following points are important :—

Inject intramuscularly 5 cg. weekly for ten doses. Then give 10 cg. weekly for five doses. Total for course—1 gramme for Solganol and Myocrysin; up to 1.2 gramme for Allochrysine.

After three months repeat the course. Four courses are usually needed in two years.

TOXIC REACTIONS

Certain reactions are liable to arise at any time during treatment, and some may even occur several weeks after its completion. In the following list, those reactions which indicate the advisability of cessation, or at least temporary interruption, of treatment are underlined :—

1. Immediate.—General malaise, giddiness and headache of a few hours' duration. Gastro-enteritis.

2. Focal.—Aggravation of joint pains and swelling after four or five doses. The reaction is a favourable sign, but a reduction of dosage is desirable.

3. Rise of temperature.—This may accompany a focal reaction or may follow an injection in a few hours. *If it persists for several days,* the onset of a digestive disturbance, exfoliative dermatitis or agranulocytosis may be suspected.

4. Gastro-intestinal and hepatic.—Abdominal pain, vomiting, diarrhœa and jaundice which may be fatal.

5. Renal.—Some 80 per cent. of the gold injected is eliminated through the kidneys. During the course of treatment albuminuria commonly arises ; it usually clears up completely on cessation of treatment, though possibly after some weeks. Stop if more than a trace present.

6. Cutaneous.—Itching, especially on the back of the neck, urticaria, and erythema, particularly on the forehead, occur fairly often. Of rarer occurrences are lichen planus, herpes labialis and herpes zoster. The most alarming skin reaction is that of exfoliative dermatitis. It is heralded by a simple erythema which gradually becomes œdematous, with a papular and then possibly a vesicular eruption superimposed. Irritation is intense. Death may occur, but recovery is the rule.

7. Oral.—Sore throat, glossitis, gingivitis and ulcerative stomatitis have all been reported. A sore throat is the commonest complication of treatment and may persist for three months.

8. Respiratory.—Bronchitis is reported as arising particularly in association with solganol.

9. Hæmic.—The hæmopathies are rare but dangerous. Granulocytopenia is the commonest, and may arise quite early in the course of treatment. It is extremely persistent and resistant to treatment.

It is clearly advisable to examine the urine at least once a week, and to do a white cell count every two to three weeks.

DRUG TREATMENT IN CARDIO-VASCULAR DISEASE

There are a few points in this connection worth mentioning to you. In the first place, the work of Evans and Hoyle on the administration of nitrites for angina pectoris is still not sufficiently known. They showed that if tablets of nitroglycerin, which are now known officially as Tabellæ Glycerylis Trinitratis, be allowed to dissolve under the tongue, absorption and action are much more rapid than when the drug is swallowed. They found, in fact, that administered sub-lingually nitroglycerin is more efficient than amyl nitrite in an attack, and, what is of greater importance, it is of superlative value in preventing recurrence. Thus patients who invariably get an attack after a certain degree of exercise, as, for instance walking to the train in the morning, may be given a sixtieth of a grain—that is to say, two of the official tablets to be taken in this manner shortly before leaving the house, and then they will escape the pain. In theory it might be argued that the avoidance of pain is unwise and, in fact, dangerous, but it seems clear that the nitrite must act by causing dilatation of the coronary vessels, and, therefore, it is not a matter of removing a symptom, but rather of eliminating or reducing the cause.

The method of treating cases of cardiac failure, especially those of auricular fibrillation with congestive failure, by means of massive doses of digitalis has been studied in detail, and Porter gives some useful tips on this subject which you will find worth while remembering. If you are faced with such a case, the body-weight must be taken, and then the standardised tincture of digitalis given in one large dose, the quantity being 2 minims for every pound of body weight. Until one has got used to it, the size of the dose is alarming, but we have had several cases respond extraordinarily well to this line of attack, and the full effect of the digitalis is seen in six to eight hours, whereas by the older method of giving 15 or 30 minims three times a day it was always several days before the maximum effect was reached, and in the meantime, of course, a fatal outcome might arise. If digitalis cannot be tolerated by mouth, it may be given per rectum, and the absorption is so complete that the dosage is actually slightly less than that by mouth, namely, 1½ minims per pound of body weight. The tincture should be mixed in three or four ounces of normal saline, and the rectum should be cleared out with a simple enema before the drug is introduced. Maintenance doses of digitalis are needed in about ten days. For massive intravenous medication, strophanthin, grains 1/33rd, may be

given. The effect here is seen in half an hour after administration.

The value of mercury as a diuretic, especialiy in cases of cardiac œdema, has long been recognised, but only in the last few years have we been in the position to employ mercurial derivatives which, though efficient as diuretics, are relatively non-toxic. The simple inorganic mercurial salts, such as mercury perchloride, are much too poisonous for use in effective doses. Probably the best-known substance is Salyrgan, but a mercurial diuretic is now in the British Pharmacopœia under the name of Mersalyl, and there are other well-known ones, namely, Neptal, Esidrone and Novurit, the last being also in suppository form. The intravenous administration is the most effective and, of course, not painful. Two cubic centimetres of Injectio Mersalyli given to an œdematous patient will produce in the subsequent 24 hours a urinary output of nearly a hundred ounces. The Novurit suppositories are also a great success, and given, as are the injections for that matter, on alternate days, an output of 80 to 90 ounces is often achieved. In every case ammonium chloride should be given for two or three days beforehand in doses of 5 grammes a day, best administered in cachet form. This greatly enhances the action of the mercurial. It is interesting to note that the administration of digitalis has no appreciable effect upon the diuresis resulting from the mercurial compound. In short, they act as efficiently in regard to the œdema, whether digitalis is given or not.

HISTAMINE

By no means a new drug, but as a method of treating chronic fibrositis and preventing chilblains its administration has perhaps not been generally recognised. The solution is 1 milligram of histamine acid phosphate in 1 c.c. of normal saline, preserved with 0.5 per cent. of phenol. Start by a subcutaneous injection of 0.1 c.c. and increase daily by 0.05 c.c. until improvement in the way of flushing and loss of stiffness occurs. Keep to this dose and repeat two to three times a week. After a month, give once a week throughout the winter.

TYMPANITES

The distressing and by no means harmless cases of abdominal distension so often occurring after operations, sometimes in old people after a shock, and frequently in those suffering from chronic heart failure, may sometimes be overcome by the use of either one or other of two relatively new drugs. The first I refer to is Doryl, which is a proprietary name for the urethane of choline. I need only say that its action is that of acetyl choline, but whereas this substance is destroyed extremely rapidly in the body, Doryl has a more persistent effect and is an antagonist of adrenalin. For post-operative urinary retention and for urinary retention as a result of spinal cord lesions, it is astonishingly effective, and it is for this that it is chiefly used. It will frequently produce the passage of flatus and reduction of abdominal distension, however, in the conditions I have mentioned. The dose by mouth is 1 to 4 milligrams (1/64th to 1/16th of a grain), but by injection the dose is 0.25 of a milligram (1/240th of a grain). Its powerful effect of emptying the bladder is not always desirable, especially when dealing primarily with cases of tympanites, and Prostigmin, which is an analogue of physostigmine, may be preferred. You will remember that a few years ago it was found that this drug had a most beneficial effect when given in cases of myasthenia gravis. In tympanitic cases the dose by mouth is 30 milligrams, *i.e.*, half a grain, and by injection 0.5 milligram (1/120th of a grain).

HEPARIN

In conclusion, I must draw your attention to this substance, of which much more will be heard in the next year or so. It was derived originally from dog liver; recently from the liver, lung and skeletal tissue of the ox. It is probably stored in the mast cells of the tissues.

Methods of purification have produced a crystalline barium salt of uniform potency. The barium is then removed, and heparin is then in the form of a powder suitable for storage. For use, a 5 per cent. solution containing 0.25 per cent. of Tricresol is prepared. It is a carbohydrate derivative (mucoitin) combined with sulphuric acid as an ester (up to 35 per cent. SO_4).

Benzidine-heparin ($C_{25}H_{65}O_{50}N_2S_5$) is a compound which is absorbed slowly and possesses similar advantages over heparin as does zinc-protamine-insulin over insulin.

Dose.—For blood transfusion, 0.001 to 0.002 mgrm. (100-200 units) per kilo of donor's weight. The suggested unit of activity is 0.01 mg. of barium-free material, *i.e.*, 100 units per 0.001 grm.

Action.—Heparin delays the clotting of blood if introduced into the body or if added to the blood after its withdrawal. The mode of action is not yet understood, but it has been postulated that it is either an antiprothrombin or an antithrombogen from which antithrombin is produced.

If heparin be added to blood after its withdrawal in a dose of 5 mgs. per 100 mils. the coagulation time is extended to a minimum of 45 minutes; an average of 100 minutes, and a maximum of 60

hours. If the interior of the blood-containing vessel is paraffined the clotting may be delayed three to five times longer.

When heparin is injected intravenously in a dose of ½ mg. per kilo and some blood withdrawn ten minutes later, the clotting time is raised to 15 minutes to 45 minutes, 1 mg. per kilo raising it to one to one-and-a-half hours. The effect is most marked during the first half-hour after administration; it passes off completely in one and a half to two hours. The bleeding time is unaffected.

Purified heparin is absorbed after subcutaneous injection and acts in a similar way.

Heparin appears to be relatively non-toxic, as much as 4 mgs. per kilo. having been given without untoward effect, except for a transient urticaria.

A certain threshold value must be reached before the anti-coagulant action is observed. This is 0.25 mg. per kilo of body-weight. It is this fact which explains the immunity of a recipient of heparinized blood from further bleeding due to the drug, for on entering the body it is diluted to below the threshold value.

Benzidine-heparin, owing to its slow absorption after subcutaneous injection, causes a prolonged moderate increase of coagulation time, *e.g.*, coagulation time 15 minutes for 6 hours.

THERAPEUTICS

Heparin is chiefly used for blood transfusion. The substance is injected into a vein of the donor and blood is withdrawn ten minutes later. For reasons stated it can then be introduced into the blood stream of the recipient without fear of encouraging further bleeding. The method simplifies transfusion technique, and obviates the possibility of unpleasant reactions from the use of sodium citrate. Should the donor receive a severe injury within two hours of heparin administration, his condition would be doubly dangerous on account of hæmorrhage from large vessels. Minor injuries would be unaffected as the bleeding time is not prolonged by heparin.

It has been suggested that it should be employed to prevent thrombosis after operations by continuous administration after a post-operative interval of 12-24 hours. Animal experiments starting with 40 units per kilo intravenously as an initial dose and followed by 30 units per kilo per hour will maintain the clotting time at 20 to 30 minutes. In man the subcutaneous administration of benzidine-heparin would probably be more satisfactory. Heparin has been given intravenously at the rate of 10 mg. per hour. This costs about one shilling per hour. As operations on the female pelvic organs provide the greatest proportion of thromboses and embolism, the method might well be tried out here.

It seems probable that in adequate dosage the condition of thrombo-phlebitis migrans might be arrested. The administration of heparin after the occurrence of coronary or of retinal thrombosis is probably useless.

Heparin may be used as an anticoagulant when collecting blood for various laboratory tests (except the Wassermann)

In the time at my disposal I have tried to give you some conception of the astounding advance in therapeutics which has taken place in the last five years and which has established pharmacology as a subject of prime importance.

What Do You Suggest ?—No. 2

(A prize of one guinea will be paid for the best solution to this problem sent in to the Editor on or before Thursday, February 16th.)

The triple tragedy of old William and his two little grand-daughters was the more sad by reason of its poignancy, its hard irony, for it was through no carelessness of any kind that the mother unwittingly caused her own children's deaths. It was sheer tragedy, deepened and made the harder to bear by the knowledge that it need never have occurred. It was this way :—

Grandpa William, who was much loved, had lived with his married daughter for some ten years and shared a first-floor bedroom with the two grand-daughters, Susan and Lily, aged five and seven respectively. They had a small double bed in one corner and he kept his bric-a-brac and also had a bed on the other side of a screen which divided the room. He very often pottered about until quite late at night, and in the winter months would keep a small gas fire going as he suffered from chilblains. If it were very cold he might get into bed to read; he had a bedside lamp and had to turn out only to put the fire out before he went to sleep.

Now one bitterly cold January night as he lay in bed the fire gradually became dimmed, then flickered and went out. The gas had become exhausted. The meter was downstairs in the

kitchen, and while old William was lying in bed screwing up courage to hop out and turn off the gas tap he dozed off to sleep—you know how easily it can happen.

At 6.30 next morning young Mrs. D. got up and went downstairs to cook her husband's breakfast. Nothing happened when she turned on the gas-stove tap, so she reached down to the meter and pushed a shilling into the slot. When her husband had gone she went on cooking the children's breakfasts and then carried them piping hot on a tray upstairs for "breakfasts in bed." As she reached the first floor landing she was quite sure she smelt gas. When she opened the door of the children's room an overpowering wave of it swept out round her. She stood rooted in the doorway. A terrible fear gripped her. The tray dropped from her grasp and she beat her way blindly over to the bed where her two little children lay. They were quite still; she shook them frenziedly, called their names without response, and then somehow dragged them under her arms towards the door. She managed to reach the landing, then became so faint and dizzy she herself collapsed. The family were not seen all day.

In the evening when Mr. D. came home he opened the door to find stark tragedy; his wife alone was still just alive. Grandpa William and the two children were dead. You see what had happened. Old William had inadvertently left the tap "on" though at the time no gas was escaping. When Mrs. D. placed that fatal shilling in the slot she unwittingly killed all three of them.

No one could deny it was tragedy. The wife tried to commit suicide the day before the inquest was to be held. Everyone had the deepest sympathy for her and everyone, including the Coroner, remarked that this triple tragedy need never have been. The Coroner seemed to voice everyone's feelings when he said: "It is time there was a safety device for cutting off the supply of gas—even when the meter is started again—except when desired and deliberately sought by hand."

Well, what do you suggest?

Reviews

The Doctrine of Signatures—A Defence of Theory in Medicine. By SCOTT BUCHANAN, Professor of Philosophy in the University of Virginia. Published by Kegan Paul. Pp. 205. *Price* 7*s.* 6*d.*

THIS essay is a consideration of present-day medicine from the standpoint of a professional philosopher.

Professor Scott Buchanan has taken as his title the name of the widely-held belief in primitive medicine, that plants and minerals bore certain symbolical marks which indicated the diseases for which Nature had intended them as special remedies; and he applies it to his text much as Sir James Frazer uses the Legend of the Golden Bough as the title for his famous work.

The Doctrine of Signatures may be called the origin of theoretical medicine, since out of it have arisen the ancient arts of diagnosis, prognosis and treatment, and the modern arts of observation, experimentation and verification.

Medicine, he says, is a profession which has Science as a base of its arts; but at the moment it is more dependent on its subsidiary sciences than is good either for it or for them. The enormous advances made in the last two hundred years by the laboratory sciences have resulted in the deification of Empiricism, and it is the duty of medicine to conquer the dogmatic aversion to metaphysics which modern empirical science produces.

The author gives a historical survey of the philosophy of medicine from Hippocrates, through Plato, Aristotle, and Galen, to the present day, and shows great skill in bringing this ancient lore into the context of a scientific discourse. In particular he compares, to its advantage, the compact teleology of Galen with the tawdry and largely inarticulate materialism of to-day.

This book will be welcomed by that minority in our profession who wonder, from time to time, what they are doing and why they do it; who like to have their assumptions questioned, and who are prepared to make an intellectual effort on the chance of discovering (and rendering articulate) a metaphysic that suits them.

Correspondence

Pneumococcal Peritonitis

To the Editor of the GAZETTE

SIR,—The case of pneumococcal peritonitis recorded by Dr. A. E. Thomas in your issue of January 28th, 1939, has interested me very much, for peritonitis of pneumococcal origin, whether primary in the peritoneum or secondary to some other focus of infection, is, as Dr. Thomas has pointed out, comparatively rare, and the prognosis bad, and therefore any published case of recovery arrests attention.

I doubt, however, whether Dr. Thomas's assumption that the recovery of his case was due to the intra-peritoneal injection of the specific anti-pneumococcal serum is legitimate.

Two events occurred—drainage of the peritoneum and, seven hours later, injection of the serum. May not the successful result be as legitimately attributed to the drainage as to the serum? Some amelioration in pulse, temperature and respiration do appear, in fact, to have occurred prior to the introduction of the serum.

This case recalls to my mind a little girl, aged eight, who was admitted into the Tolworth Isolation Hospital under my care on November 9th, 1909, on suspicion of typhoid fever. The case was published in the *B.M.J.* of May 21st, 1910, and I will not go further into details than to say that the child was found to be suffering from pneumococcal peritonitis, was opened, washed out and drained—and recovered.

There was no anti-pneumococcal serum in the market in those days.

At the present time I have under my care in the Tolworth Isolation Hospital a little girl, aged seven, who was sent in about the third day of her illness with a provisional diagnosis of meningitis; she has, in fact, turned out to be a pneumococcal meningitis, the pneumococcus (type IV) having been cultured from her cerebro-spinal fluid. She is now convalescent.

Three events occurred: (1) tapping her cerebro-spinal fluid to 36 c.c.; (2) introducing 10 c.c. anti-meningococcal serum (not knowing then what the infecting agent was), and (3) the exhibition of sulphanilamide 24 hours later, as soon as the agent was known.

I feel great doubt as to which of these events, if any of them, led to her recovery, but I think it is as legitimate to attribute it to the drainage of her cerebro-spinal fluid as to the sulphanilamide, more especially as there were signs of improvement before the drug was given.

Yours, etc.,

HARRY COOPER.

Surbiton.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.

(*continued*)

Sunday, November 7th

A lovely day, and went with the Grahams to see their summer place at Lake Muskoka, about 140 to 150 miles north of Toronto. On these concrete roads to cover the first 100 miles in two hours is not hurrying unduly. Then we struck rather worse roads and the typical scenery of these parts, which reminded me very much of the country round Stockholm. It is all low rolling hills, which consist of granite masses worn smooth and grooved by glacial action, projecting through sparse soil. There is a fairly abundant growth of pines and silver birch with a few poplar, but the whole countryside was scoured clean by the lumber camps about fifty years ago, so all these trees are second growths, and among them are the rotting stumps of the old firs—not giants, but 12 to 24 feet across. Here and there are small fertile valleys, and everywhere lakes of irregular shape sending bays into the depressions between the hills. There is no heather, or the scene might be very like Scotland.

After another hour or so we came to Minett's Hotel, and then took the car on to Graham's house. These lakes are all divided up into holiday holdings, houses very much alike standing in anything from five to one or two acres on the lake shore. The country is just like wild forest, with perhaps a bit of lawn or a small rockery. The houses are of the Swiss chalet type, standing back 20 to 30 feet, so that when the birches and alders are out I imagine they are quite invisible. On the water's edge are boat sheds, landing platforms, diving boards, and so on. There are many islands, all of which are inhabited, mostly by fairly wealthy people. The roads are a bit rough, and daily shopping and news collection is largely by boat. There are largish hotels, of which Minett's is a sample, dotted about, and these serve for recreation, meeting ground, extra meals, and visitors who do not own houses. A number of Americans own land here, and apparently appreciate a change from the country of the free very greatly.

The Grahams' house is on a little peninsula, a plainly furnished wooden place, but very comfortable. The boat house has a 26-ft. launch, a sailing boat, a row boat, and two Indian canoes. An interesting feature is a large ice house filled with sawdust. The settler who looks after the house in the winter cuts out blocks of ice about 14 ft. by 1 ft. square from the lake at the end of the winter and fills this house with them, and this ice apparently lasts for the whole year. This

chap Ferguson volunteered to launch the motor boat—a big undertaking. After lunch at Minett's he brought it across for us, and we had a lovely cruise round the lake lasting about two hours. The Grahams are rightly very proud of their toy, and we had a great day, driving back mostly in the dark.

Monday, November 8th

Presented myself at the Children's Hospital at 9 a.m. for a demonstration of his scoliosis work by Le Mesurier. Le Mesurier (pronounced "Measurer") is about as French as Grogono is Italian—a great fellow, interests chiefly orthopædic, but a general surgeon with his teeth in principles and no stunts. The first show was hare-lip, where he does a Z type of dovetail that looks a bit complicated and un-physiological Results in a very long lip, which may be an advantage.

His scoliosis work is that of the New York Orthopædic Hospital. He says it is not the work of one special man, but of a group, and he has applied it in his own way. The original idea is Hibbs', but since he died it has been improved and amplified. The basis of the method is to find the primary curve, straighten it, and then fix it by an arthrodesis operation. The primary curve is the one associated with most bone changes, and is always the stiffest. To identify it, X-rays are taken of the spine in different positions designed to eliminate each curve; for instance, sitting with a block under one buttock, then under the other. They have here an X-ray apparatus with which they can take films 3 ft. long, with the tube 8 ft. away. It is very useful to show the whole spine, or the whole pelvis and lower limbs. Compensatory curves can be made to disappear, but the primary one will remain to some extent. When it is identified it is also necessary to determine its centre and the number of vertebræ it involves. The centre of the curve is the position of the hinge in the straightening apparatus; the involved vertebræ are the length of spine that will ultimately be fixed by the arthrodesis. The centre is marked on the surface by a lead shot, and afterwards by a dye or silver nitrate so that it can be referred to.

Straightening is done by gradual correction in a hinged plaster jacket. Here Dunlopillo shows to great advantage; everything is padded with it, it is rolled over the edges, keeps clean, soft and not smelly for months, while it is porous enough to allow perspiration. The New York people apply a single jacket and cut it afterwards. Le Mesurier says this gives a very uncomfortable shape that tends to dig in. He puts on two halves, in the case we examined closely, as illustrated. He usually takes in the head and leaves the opposite axilla quite free. The thing is to get as broad an area of push as possible each end.

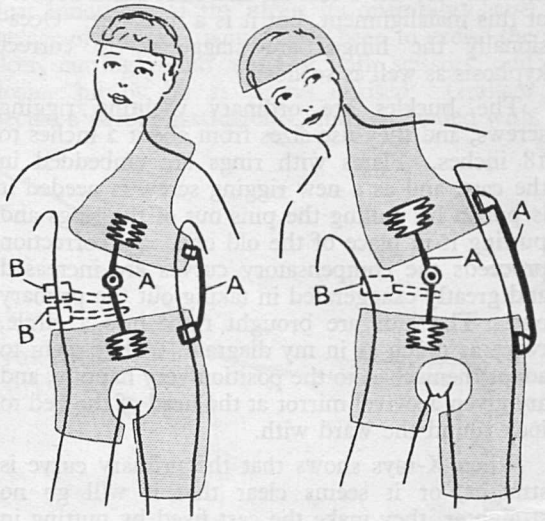


Fig. 93

Cast and Hinges Applied. Half Corrected.
Shaded Portion = Padded Plaster Case.
A. = Hinge and Turnbuckle. B. = Pads.

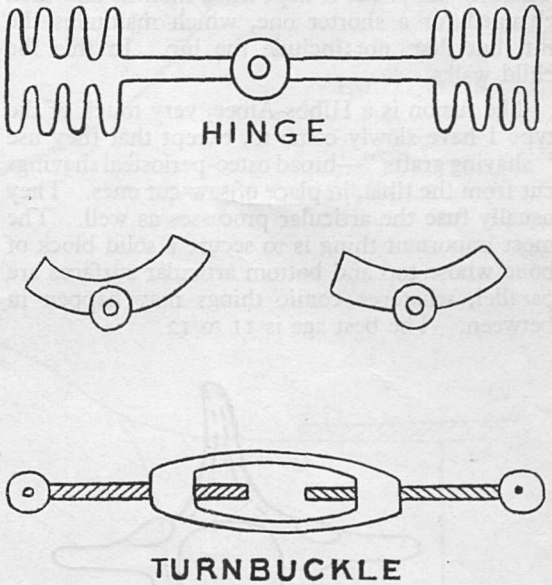


Fig. 93A

The hinges (of which, of course, there are two —one front and one back) are of duraluminium, and fanned out something like sketch for embedding in the plaster. The hinge is put exactly at the level of the centre of the primary curve, and about the mid-line of the body, ignoring the

position of the spine; this seems to work best as position is corrected, neither pulling head cast down nor pulling it up. Sometimes it is necessary half-way to take a cast off and start again because of this malalignment, but it is a nuisance. Occasionally the hinges are staggered, to correct kyphosis as well as scoliosis.

The buckles are ordinary yachting rigging screws, and they use sizes from about 2 inches to 18 inches. Plates with rings are embedded in the cast, and as a new rigging screw is needed it is put in by pulling the pins out of the rings and putting it in place of the old one. As correction proceeds the compensatory curves are increased and greatly exaggerated in taking out the primary one. The kids are brought right into a circle, twice as much as in my diagram. They seem to adapt themselves to the position very happily, and are given a swivel mirror at the head of the bed to look round the ward with.

When X-rays shows that the primary curve is straight, or it seems clear that it will go no straighter, they make the cast fixed by putting in plaster struts to connect the two halves and taking out the hinges and turnbuckle. A hole large enough for operation is cut in the back, and the spine is arthodesed over the primary segment. The original jacket is kept three months and then changed for a shorter one, which maintains the tilt, but does not include the hip. In this the child walks.

The fusion is a Hibbs-Albee, very much of the type I have slowly come to, except that they use "shaving grafts"—broad osteo-periosteal shavings cut from the tibia, in place of saw-cut ones. They usually fuse the articular processes as well. The most important thing is to secure a solid block of bone whose top and bottom articular surfaces are parallel, whatever comic things may happen in between. The best age is 11 to 12.

I saw a child after a torticollis operation put up nicely and simply, with a jacket and a head cap, the two joined by a free curved plaster sausage that left the neck clear.

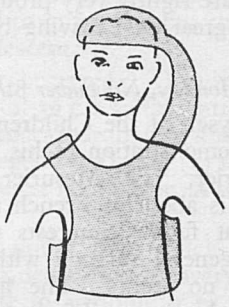


Fig. 95

I was rung up at 11 o'clock to come across to the General and take part in another huddle (symposium) on gastric ulcer surgery, where I realised even more that they take the same views as we do at Guy's (I thought they were rather attracted by Finney's operation, but apparently this is not so, and Graham is only playing with it).

Brebner, of Johannesburg, whom I had already met in Chicago, was there. He spoke with enthusiasm of *Epidural* anæsthesia, which he had seen practised in the Spanish Hospital at Buenos Aires by a surgeon whose name he could not remember. He uses 2 per cent. Novocaine without adrenalin, quantities varying from 17 to 45 c.c. He used to inject at required level, but now always uses space between 1st and 2nd lumbar vertebræ. Patient is sitting, needle is attached to syringe, containing bubble of air. As soon as ligamentum subflavum is traversed, and epidural space is reached, pulsations are visible in the air bubble. Inject slowly. Anæsthesia lasts two hours, and is not accompanied by the fall in blood pressure of a spinal.

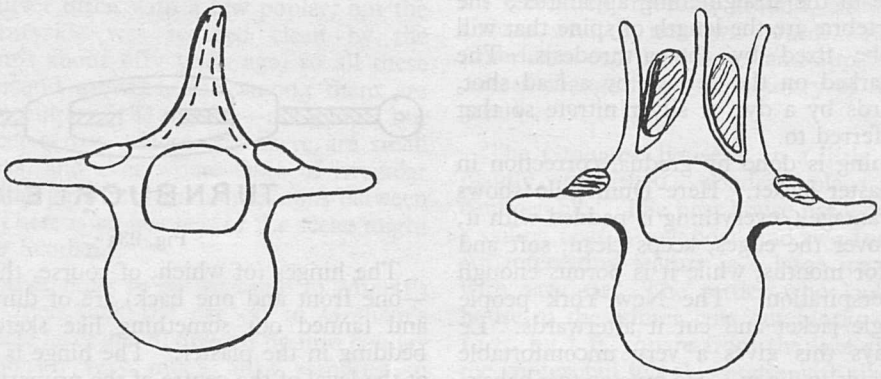


Fig. 94

At 11.30 a.m. Graham attacked a gastric case. Right paramedian. Found an ulcer very high up indeed, and posterior. The man was 71 with achlorhydria and constant blood in small amounts, suggesting cancer though the stomach looked nothing like it. He divided the falciform ligament, and then mobilised the left lobe of the liver, an excellent step that I have neglected. He removed spleen, tied left gastric artery high, and had stomach hanging on by œsophagus and looking a bit purple. My inclination, considering the pretty clear innocence of the ulcer, its operability, and the age of the man, would have been to excise the ulcer, cutting round above it with scissors, and closing bit by bit as it was excised. Graham elected a partial gastrectomy, and got landed with

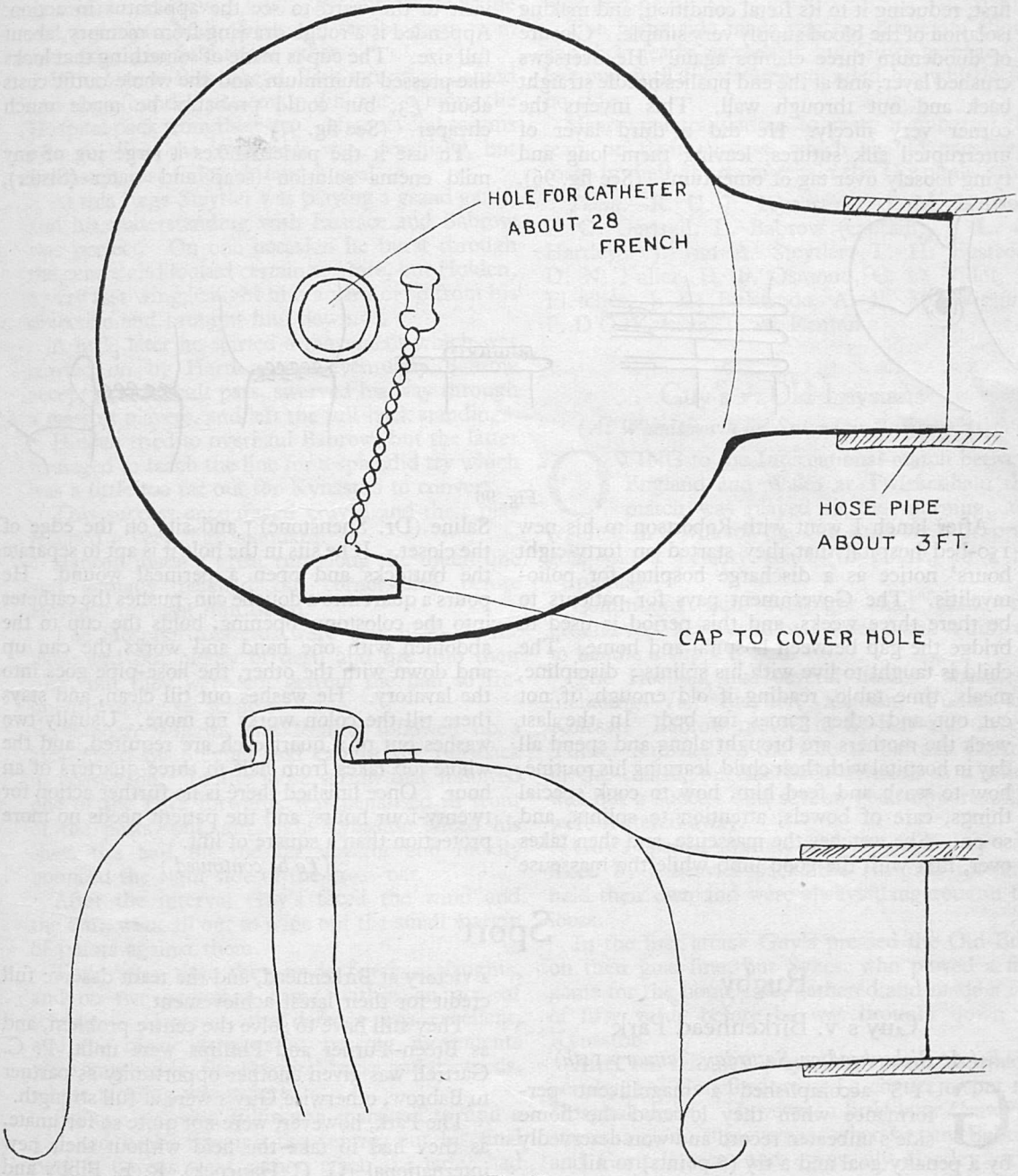


Fig. 97
Rough sketch from memory of Lewis's Colostomy Clamp.

a very difficult operation, an excision that passed right through the edge of the ulcer, and a comic-shaped stomach. It did bleed, but it was horrible black blood, and I doubt its viability. (This patient made an excellent recovery, and was well a year later.) Used Schoemaker clamp again. In clearing duodenum after turning up stomach, he divides peritoneal reflections freely with knife first, reducing it to its fœtal condition, and making isolation of the blood supply very simple. Closure of duodenum three clamps again. He oversews crushed layer, and at the end pushes needle straight back and out through wall. This inverts the corner very nicely. He did a third layer of interrupted silk sutures, leaving them long and tying loosely over tag of omentum. (See fig. 96).

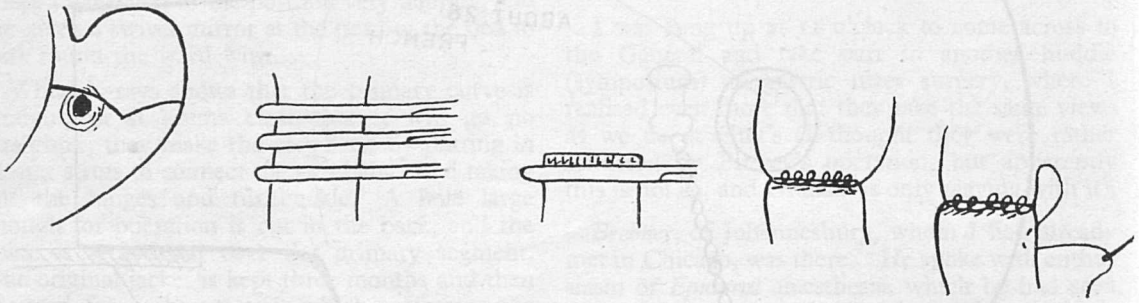


Fig. 96

After lunch I went with Robertson to his new 150-bed hospital that they started on forty-eight hours' notice as a discharge hospital for polio-myelitis. The Government pays for patients to be there three weeks, and this period is used to bridge the gap between hospital and home. The child is taught to live with his splints; discipline, meals, time table, reading if old enough, if not cut out and other games for bed. In the last week the mothers are brought along and spend all day in hospital with their child, learning his routine, how to wash and feed him, how to cook special things, care of bowels, attention to splints, and so on. She watches the masseuse, and then takes over, first with the good limb while the masseuse does the bad one, then on the masseuse's arm to see that the pressure is right, then on the bad limb. She gets a book of instructions. Finally she takes the child home, and will be visited there from time to time by some after-care person..

I left at 6 p.m. for Boston, very sorry to leave the Grahams. Before leaving, not yet having seen Lewis's colostomy arrangement, I paid a hurried visit to the ward to see the apparatus in action. Appended is a rough drawing from memory, about full size. The cup is made of something that looks like pressed aluminium, and the whole outfit costs about £3, but could probably be made much cheaper. (See fig. 97).

To use it the patient takes a large jug of any mild enema solution (soap and water (Sister), Saline (Dr. Shenstone)) and sits on the edge of the closet. If he sits in the hole it is apt to separate the buttocks and open a perineal wound. He pours a quart into a douche can, pushes the catheter into the colostomy opening, holds the cup to the abdomen with one hand and works the can up and down with the other, the hose-pipe goes into the lavatory. He washes out till clean, and stays there till the colon works no more. Usually two washes out of a quart each are required, and the whole job takes from half to three-quarters of an hour. Once finished there is no further action for twenty-four hours, and the patient needs no more protection than a square of lint.

(To be continued.)

Sport

Rugby

Guy's v. Birkenhead Park

(At Birkenhead on Saturday, January 14th)

GUY'S accomplished a magnificent performance when they lowered the home side's unbeaten record and won deservedly by a penalty goal and a try (6 points) to nil.

It is many years since the Hospital registered a victory at Birkenhead, and the team deserve full credit for their latest achievement.

They still have to solve the centre problem, and as Breen-Turner and Phillips were unfit, P. C. Gartrell was given another opportunity as partner to Babrow, otherwise Guy's were at full strength.

The Park, however, were not quite so fortunate, as they had to take the field without their new international (G. C. Hancock), R. E. Bibby and W. M. Channing.

Owing to fog, Guy's were considerably delayed, and when they arrived they had to change and take the field immediately. Luckily they won the toss and during the first half had the advantage of a strong breeze.

The home side kicked off and during the first minute or two their forwards made some dashing raids which gave the Hospital some anxious moments. However, Guy's got into their stride and a glorious bout of passing carried them from one end of the field to the other.

It was now Birkenhead Park's turn to defend and they found it extremely difficult to move the Hospital pack from their 25. After several scrums near the line, the home side were penalised, but Kynaston just failed to land a goal.

At this stage Steytler was playing a grand game, and his understanding with Eustace and Babrow was perfect. On one occasion he burst through the centre and looked certain to score, but Holden, a very fast wing, caught him a yard or so from his objective and brought him down.

A little later he started a movement which was carried on by Hartley, and eventually Babrow accepted a difficult pass, swerved his way through a mass of players, and left the full-back standing.

Holden tried to overhaul Babrow, but the latter managed to reach the line for a splendid try which was a little too far out for Kynaston to convert.

This success encouraged Guy's, and their play reached a very high standard.

Hanson made a great run along the touch line and actually reached the corner flag before Hosking brought him down.

The Hospital forwards were very lively in the loose and put plenty of dash and fire into their play, but they were not getting the ball so frequently in the set scrums.

Fletcher, Wiggins and Renton followed up a kick-ahead by Steytler and caught the full-back in possession. In the loose scrum that followed one of the Park forwards was penalised in front of the posts, but, although Kynaston sliced his shot, the ball hit the far upright and luckily bounced the right side of the cross-bar.

After the interval Guy's faced the wind and the Park went all out to wipe out the small margin of points against them.

Time after time they made fierce onslaughts, and on two occasions came within an ace of scoring. However, the defence was excellent, and the many attempts at passing movements were smashed by the Hospital backs and forwards, whose tackling was superb.

On one occasion Billington managed to find a gap and broke through the centre, but his final pass to Owens went astray, when the latter had the Hospital line at his mercy.

Towards the end, Guy's once again took up the offensive and a delightful bout of passing between Steytler, Babrow, Gartrell and Hanson transferred play to their opponents' 25.

With the Park fumbling the ball, Guy's looked certain to score, when Billington came across and took the ball from the feet of the Hospital forwards and cleared with a terrific kick which found touch near mid-field.

The home side made one last desperate effort, and they nearly succeeded, but Guy's managed to last out until the referee sounded his whistle for no-side.

Hearty congratulations to every member of the team on their success, which should encourage them in their efforts to regain the Hospitals' Cup.

Team.—R. U. F. Kynaston; J. M. Hanson, P. C. Gartrell, L. Babrow (captain), J. L. G. Hartley; J. van A. Steytler, T. H. Eustace; D. N. Fuller, H. F. Osmond, C. C. Vidot, P. Fletcher, J. C. Bulstrode, A. E. M. Wiggins, P. D'O. Kolesar, T. W. Renton.

Guy's v. Old Leysians

(*At Wandsworth on Saturday, January 21st*)

OWING to the International match between England and Wales at Twickenham this match was played in the morning, and resulted in a win for the Old Boys by a dropped goal and 2 penalty goals (10 points) to a try (3 points).

Continuous rain overnight had made the ground very heavy, and both sides found it difficult to handle a slippery ball.

The Hospital had several notable absentees, including Van Steytler, Hanson, Fuller and Kolesar. Babrow moved to fly-half and Breen-Turner returned to the side to partner Gartrell in the centre, but the back division as a whole was not a success and several good opportunities were frittered away.

Guy's opened strongly and, although they were faced by a heavier pack, the Hospital forwards held their own and were always dangerous in the loose.

In the first attack Guy's pressed the Old Boys on their goal line, but Sykes, who played a fine game for the home side, gathered and made a run of fifty yards before he was brought down by Kynaston.

After ten minutes' play, Guy's were awarded a penalty, but Crawford missed a chance to put the Hospital ahead. However, a little later Crawford started a glorious movement when he sent Babrow and Gartrell away and eventually Hartley raced over for a try near the corner flag.

Guy's continued to have the advantage and did everything but score. After Sykes had missed with a good attempt at a penalty goal, the Old Boys, against the run of the play, took the lead when Jones, their full-back, fielded the ball just inside the Hospital half and dropped an excellent long-range goal.

Towards the interval they increased their lead when Sykes kicked a really fine penalty goal; considering the conditions, it was a feat to make the heavy ball rise on a sticky ground.

After the change of ends, Guy's attacked strongly, and on three occasions they were awarded penalties, but Crawford missed them all.

The Hospital were playing well and did not deserve to be in arrears, but they lacked finish and failed to polish off several good rounds of passing.

A quarter of an hour from time Sykes made the issue safe for the Old Boys when he again obliged with another penalty goal, from a difficult angle.

In the closing stages the forwards fought out a merciless duel, and in spite of the heavy going both sides made great efforts to open up the game, but no further score resulted.

Team.—R. U. F. Kynaston; J. P. Crawford, J. S. Breen-Turner, P. C. Gartrell, J. L. G. Hartley; L. Babrow (captain), T. H. Eustace; C. C. Vidot, H. F. Osmond, J. P. Rochford, J. C. Bulstrode, J. R. D. Williams, A. E. M. Wiggins, P. Fletcher, T. W. Renton.

Guy's v. Old Whitgiftians

(*At Honor Oak Park on Saturday, January 28th*)

AFTER being led at the interval by eight points to three, Guy's staged a grand recovery in the second half and won comfortably by 3 placed goals, a penalty goal and 2 tries (25 points) to a placed goal, a penalty goal and a try (11 points).

Once again the Hospital rearranged their three-quarter line, by bringing J. P. Crawford into the centre and P. F. Camp, who played in the early games of the season, was given another chance on the wing.

H. F. Osmond was in great form, and his hooking was a feature of the game; time after time he secured the ball in the scrums.

The ball came out quickly and Eustace sent out a splendid service to Van Steytler, who once again played a great part in the success of his side.

With J. P. Crawford and Babrow combining well in the centre, it was surprising that Guy's did not run up a bigger score, but during the first period of the game many final passes went astray when tries should have been scored.

The Old Boys had a heavy pack, but they were overshadowed by Osmond's brilliant hooking. They were very lively in the loose, covered each other well, and were quick to pounce on a loose ball.

The Old Boys gave a better display than the score suggests, but they found Guy's at their best, and any attempt at attacking movements were checked by some brilliant tackling by the Hospital backs.

After Guy's had done most of the attacking, the visitors took the lead, when Dubois kicked a good penalty goal from a difficult angle.

Guy's retaliated soon afterwards when Crawford finished a splendid movement with Babrow and Camp, and finally he crossed in the corner for an unconverted try.

The Hospital continued to attack, but on several occasions the movements broke down at the critical stage, and the Old Boys managed to keep the line intact.

Against the run of play the visitors took the lead again when R. H. Dubois intercepted and ran through with his wing alongside. Both Hanson and Kynaston were on the spot to check his progress, but they hesitated and eventually Adams received and, showing a clean pair of heels, raced in behind the posts for a try, which Dunnage converted.

Immediately after half-time Guy's pressed strongly, and within a minute crossed for an unconverted try and followed this up a little later with a splendid dropped goal.

Having taken the lead, Guy's went all out to increase their advantage, and the Old Boys were penned in their 25. Unfortunately for the visitors, one of their forwards received a kick on the head and had to leave the field. During his absence, Guy's scored three tries in quick succession. The forwards were playing a magnificent game and backed up each other splendidly; at this period Guy's were irrepressible.

A kick ahead by Van Steytler was followed up by Wiggins, who just beat the full-back in the race for the touch-down, and Kynaston added the goal points.

Then Fletcher combined beautifully with Babrow in a run down the centre, and Renton finished off the movement with a try, which Kynaston converted.

In another attack backs and forwards combined cleverly and eventually Fletcher registered another fine try, and again Kynaston placed the ball over the cross-bar.

The Old Boys rallied towards the end and, following a really fine dribble by F. C. Dubois, the latter created an opening for his brother, R. H.

Dubois, who picked up and raced near the posts for an unconverted try.

Team.—R. U. F. Kynaston; P. E. Camp, J. P. Crawford, L. Babrow (captain), J. M. Hanson; J. van A. Steytler, T. H. Eustace; J. P. Rochford, H. F. Osmond, C. C. Vidot, P. Fletcher, J. C. Bulstrode, A. E. M. Wiggins, P. D'O. Kolesar, T. W. Renton.

Boxing

INTER-HOSPITALS BOXING CHAMPIONSHIPS

GUY'S WIN THE CHALLENGE CUP

STUDENTS from the hospitals of London, St. Thomas's, St. Mary's, St. Bartholomew's, Charing Cross and Guy's met at the Stadium Club last Friday night to do battle for the United Hospitals' Boxing Club Challenge Cup, and many spirited bouts, characterised by good boxing, action fighting of a most vigorous nature, and also much wild slogging, were witnessed by an enthusiastic crowd, which included Professor T. B. Johnston, Mr. T. J. Evans (Dean of the Medical School), Mr. H. L. Eason, Mr. J. H. E. Winston, Mr. F. N. Doubleday and Professor H. B. Fenn.

There may not have been as much science shown by the undergraduate fighters as one would like to see during the contests, but there was spirited fighting, and real courage of a high order. Though scientific boxing was at a discount in most instances, the evening's entertainment did not suffer on that account, for, as in former years, hard hitting was the rule rather than the exception, and many of the competitors, rather than go in for the finer side of the game, seemed keenly aware of the limited time at their disposal and went all out for a quick piling up of points.

By far the most accomplished team on view, the Guy's men won four of the eight titles at stake, and showed all that is best in university boxing in addition to courage and sporting spirit. To a sustained roar of the student spectators Guy's with their strong team made sure of putting the Hospital's name on the 1939 *plaque of the Inter-Hospitals' Boxing Cup, and finished first with* 26 *points, St. Thomas's being second with* 19 *points, and London third with* 15 *points. This is the first time Guy's have won the Cup in sixteen years of boxing, the last occasion being* 1923.

Our policy has been, first and foremost, to make the Club popular and flourishing, by providing facilities for training and instruction for those who have little or no experience in the sport, but are keen to learn and improve. The numbers and enthusiasm of those who turned up for training was very encouraging. Tom Ringer, who coached the Hospital team this year, made the best use of the material at his disposal and, with four of last year's team as a nucleus, the Club worked hard in building up a team, the members of which trained with enthusiasm, fought with fixed determination, and won for Guy's a leading position in university boxing.

The outstanding boxers on view were the brothers Halamandres, both attracting attention by their clever boxing and heavy punching. Otto's (A. A.) decisive punching in the lightweights was the chief factor in Guy's gaining three victories at the expense of boxers, who tried to ward off their aggressive opponent, but found they could make no headway against a boxer who made every blow tell.

Indeed, A. A. Halamandres treated all his opponents similarly, and in turn planted a barrage of lefts and rights on N. M. Panton (St. Mary's), S. C. Appleton (St. Thomas's) and A. P. Bentall (Bart.'s), to win the lightweight honours easily by rendering his opponents *hors de combat.*

Otto Halamandres impressed the writer as having an indisputable future in the ring if he perseveres. He is armed with an orthodox straight left, speed, judgment of distance, a right hand capable of making many men taste the resin, and a physique well fitted for the rigours of the ring. His flailing attacks, his skill in making his opponents miss and falter before his incessant hail of blows, and the destruction which he carries in both hands make him, together with brother Costa, the *pièce de résistance* of the Guy's team.

Costa Halamandres (Guy's) gave a brilliant display of scientific boxing to outpoint a very hard-hitting opponent in P. E. Coffey (St. Thomas's), the bout proving one of the best of the evening. Halamandres, in winning the welterweight division, showed his ability to seize an opening and cleverly outboxed his man, bringing to light all the best-known features of boxing.

R. N. Lewis (Guy's), a sturdy flyweight with heavy right punches, soon sized up M. P. Pick (St. Thomas's), to win the opening final by a knock-out in the first round. Lewis waded in with heavy right-hand crashes to the jaw, attacking relentlessly, and a terrific right midway through the first round finished the fight.

An excellent display of resolute two-handed fighting was given by E. Harvey (Guy's) in beating J. F. Watson (St. Mary's) in the bantam-weights. Watson fought pluckily, but the Guy's boy's determined attack and his ability to take a punch as well as give one resulted in a narrow win on the referee's casting vote after a close but thrilling contest.

P. E. Jones (Guy's) was plucky in the feather-weights, and carried off the honours against E. J. Richards (London) in his rough semi-final bout, which was a hard scramble throughout. In the final, Jones was outmatched against the experienced D. M. L. Doran (St. Thomas's), and the contest ended in the first round after the former had pluckily taken heavy punishment.

In the middle-weights T. R. Wooldridge (Guy's) proved himself a useful fighter by winning his preliminary bout against E. Levine (Bart.'s) on a technical knock-out in the second round. In the semi-final he gave a courageous display against an opponent who proved stronger than himself, being knocked out in the first round by C. E. J. Glaisher (St. Thomas's), who lost the final by a narrow points victory to G. P. Scott (London).

Dennis Fuller (Guy's) scored in the small measure of infighting in his light-heavyweight semi-final, but this advantage was swallowed up in the pile of points M. A. Ashby (London) scored with his left. Fuller fought gamely, but was beaten by a clever performer.

The light-heavyweight final between R. W. Ross (St. Mary's) and M. A. Ashby (London) was keenly anticipated. Ross is the " cave-man " type who lurches round the ring with a fearsome expression, his hands down, and suddenly whips round and charges in with a wallop which may make a hole in the roof. In this way he knocked out R. S. Henderson (Bart.'s), but Ashby coolly boxed him off and also picked up points with light measuring lefts. There was always the possibility of a K.O. by Ross, but in the end Ashby was mixing it well, and his was a fine victory, which was greeted with terrific applause.

In the heavyweight division J. Rochford (Guy's), boxing in his first contest, put up a plucky display against P. D. Wilkins (St. Thomas's), but was outdone in all phases of the game through lack of experience, and lost in the first round to a heavier and more experienced opponent.

At the termination of the tournament Mr. R. F. Kerslake, Vice-President of the University of London Union, presented the Cups to the winning boxers and the handsome Club Challenge Cup to R. N. Lewis, Captain of the winning team. The final placing of the hospitals was as follows :—

	points		*points*
Guy's	26	St. Mary's	14
St. Thomas's	19	St. Bartholomew's	7
London	15	Charing Cross	1

The following are the complete results :—

Flyweights.—R. N. Lewis (Guy's) beat M. P. Pick (St. Thomas's) on a knock-out in the first round.

Bantam-weights.—Semi-final, J. F. Watson (St. Mary's) beat S. Goldman (London) on points ; Final, E. Harvey (Guy's) best J. F. Watson on the referee's casting vote.

Feather - weights. — Semi - finals, P. D. Jones (Guy's) beat E. J. Richards (London) on points ; D. M. L. Doran (St. Thomas's) beat T. J. Brady (Bart.'s) on points. Final, D. M. L. Doran beat P. D. Jones on a knock-out in the first round.

Lightweights.—Preliminaries, A. A. Halamandres (Guy's) beat N. M. Panton (St. Mary's) on a technical knock-out in the third round ; Semi-finals, A. A. Halamandres beat S. C. Appleton (St. Thomas's) on a knock-out in the first round. A. P. Bentall (Bart.'s) beat W. E. Mahon (London) on points. Final, A. A. Halamandres beat A. P. Bentall on a knock-out in the first round.

Welter-weights.—Semi-finals, P. E. Coffey (St. Thomas's) beat J. W. G. Evans (Bart.'s) on points. C. Halamandres (Guy's) beat M. E. Bazett (St. Mary's) on a technical knock-out in the second round. Final, C. Halamandres beat P. E. Coffey on points.

Middle-weights.—Preliminaries, T. R. Wooldridge (Guy's) beat E. Levine (Bart.'s) on a technical knock-out in the second round. Semi-finals, G. P. Scott (London) beat L. B. Cohen (St. Mary's) on points ; C. E. J. Glaisher (St. Thomas's) beat T. R. Wooldridge (Guy's) on a knock-out in the first round. Final, G. P. Scott beat C. E. J. Glaisher on points.

Light-heavyweights.—Preliminaries, M. A. Ashby (London) beat S. A. MacDonald (St. Thomas's) on points. Semi-finals, R. W. Ross (St. Mary's) beat R. S. Henderson (Bart.'s) on a knock-out in the third round ; M. A. Ashby (London) beat D. Fuller (Guy's) on points. Final, M. A. Ashby beat R. W. Ross on points.

Heavyweights.—Semi-finals, T. G. McGavin (St. Mary's) beat C. J. Foord (London) on a knock-out in the first round ; R. D. Wilkins (St. Thomas's) beat J. Rochford (Guy's) on a knock-out in the first round. Final, J. G. McGavin, w.o.

G. R. W. N. LUNTZ.

Association

INTER-HOSPITALS' CUP, 1ST ROUND

GUY'S *v.* LONDON

AT Honor Oak Park on Saturday, January 28th, Guy's defeated London in the first round of the Hospitals' Cup by 2 goals to 1. Unfortunately for this match Rees, our captain and inspiring forward, was an absentee.

Guy's lost the toss, and kicked off against the wind. London soon attacked, and their nippy

forwards worked one or two openings which they failed to profit from.

The Guy's forwards found the heavy going a definite disadvantage, and it caused many passes to go astray.

Elder was an energetic leader, and he received good support from Jones on the right wing. On several occasions Guy's seemed certain to score, but keen tackling by the London backs prevented this. On the other hand, London had only themselves to blame for not taking the lead, their fault being the inability of their inside forwards to shoot. At half-time there was no score.

On the resumption London attacked keenly for fully ten minutes, and if it had not been for sterling work by our custodian and his two backs, London must surely have scored.

After sixty minutes Guy's opened the scoring through Elder, who gave the goalkeeper no chance of saving with a left-footed drive after a pass from Brown. The lead was well deserved, as Guy's had settled to some clever football, and our forwards were combining well.

However, this lead was short-lived, and after seventy minutes' play London levelled the score after a fatal back pass by one of the Guy's half-backs. The alert Higgs saw his chance and, gaining the ball, raced through to give his centre-forward a perfect pass. The latter's shot was saved by Stebbings, but the ball landed at the feet of London's outside left, who calmly walked it into the net.

The last twenty minutes was a desperate struggle with both teams striving for the lead. The winning goal was scored after a further ten minutes. An infringement by London's centre-half led to a free kick for Guy's from 30 yards out. The kick was well placed by Lee, enabling Jones to head a clever goal from close range.

London fought desperately to level the scores, but the Guy's defence remained supreme to the end.

Result.—Guy's, 2 (Elder, Jones); London Hospital, 1.

Team.—H. P. Stebbings; G. H. Pearson, B. M. Heap; D. E. Williams, D. A. T. Payne, Dr. H. A. Lee (captain); J. E. Jones, A. V. Hurst, J. Elder, R. Finney, G. A. Brown.

INTER-HOSPITALS' JUNIOR CUP
GUY'S *v* MIDDLESEX

ON Tuesday, January 31st, Guy's, the holders, easily defeated Middlesex Hospital at Honor Oak Park by 11 goals to nil.

Half-time was reached with the score 3—0 in our favour, Cadman (2) and J. R. C. Mathews scoring.

In the second half, with a following wind, Guy's attacked the whole time, and before the end further goals were added by Cadman (1), J. R. C. Mathews (3), Humphreys (3) and J. A. Williams (1). Fifteen minutes from the end C. S. Mathews had to leave the field with a badly wrenched knee.

In the next round Guy's meet St. George's at Honor Oak Park.

Team.—R. G. Haigh; S. Middleton, J. M. Thomas; A. E. Cadman, B. R. Wilshire, C. S. Mathews; E. Williams, J. A. Williams, J. R. C. Mathews (captain), W. Humphreys, E. A. Williams.

Result.—Won 11—0.

Hospital Information, etc.

Notices

MEDICAL SCHOOL
DIPLOMA IN ANÆSTHETICS

A course of instruction in preparation for the May Examination for the Diploma in Anæsthetics of the Conjoint Examining Board in England will commence on Monday, 24th April, provided that there is a minimum number of seven entrants. The Course will cover a period of three weeks, and will include lectures in Anæsthetics, Physiology, Anatomy, Pharmacology and Clinical Investigations.

The Course will be open to men and women graduates. The fee for the Course will be £15 15*s.* 0*d.*

Further information may be obtained from the Dean, Guy's Hospital Medical School, London Bridge, S.E.1.

DENTAL SOCIETY

The Fortieth Annual Dinner of the Guy's Hospital Dental Society will be held on Saturday, March 4th, at 7 for 7.30 p.m., at Grosvenor House, Park Lane, W.1. (Nearest station, Marble Arch.)

A Clinical Meeting, consisting of a Morning and an Afternoon Session, will be held in the Dental Department on the same day, to which all past and present students are invited. Demonstrations will be given by members of the Staff, and cases of clinical interest will be shown. The Morning Session will commence at 10.30 a.m. and the Afternoon Session at 2.30 p.m.

Pass List

CONJOINT BOARD.
FINAL EXAMINATION.
January, 1939.

Pathology.

A. B. Bell
A. Bloom
G. C. Bough
A. R. Bradley
D. M. F. Carter
G. H. D. Channing
F. N. Glover
A. B. Lennie
E. J. A. Needham
C. H. Phillips
T. G. Pritchard
R. G. Thomas
J. Y. D. Wakeham

Surgery.

P. H. Birks
H. H. Crabb
C. K. Cole
A. J. Drew
*P. Forgacs
*J. M. French
*H. Greenburgh
*W. E. Greenwood
*W. R. L. Harrison
M. F. Hart
W. J. T. Howard
*A. C. C. Hughes
*D. J. A. Alban-Jones
J. A. Bowen-Jones
*O. G. Lane
*H. A. Lee
*K. S. MacLean
E. L. Moll
*R. F. Parfitt
C. H. Phillips
G. J. F. Rees
H. D. Venning
*H. J. Voss

Medicine.

A. D. Bell
E. B. Berry
D. M. F. Carter
*R. G. Chapman
*D. Stafford-Clark
C. A. G. Cook
R. H. Evans
F. N. Glover
C. F. Hawkins
*R. E. Horton
*D. A. H. Johnson
*P. J. M. Kent
*C. W. Kesson
A. H. Knight
*H. A. Lee
T. S. Leedham
J. Lynch
*C. M. Norman
*G. J. Parfitt
*R. F. Parfitt
*T. M. L. Price
D. B. Seymour-Price
*C. P. F. Quinnell
*C. H. J. Rey
*R. G. Robinson
M. A. Shellim
G. N. J. Thomas
*D. Tumrasvin
W. R. D. Wiggins
*E. H. Williams
J. A. Yates

Midwifery.

R. H. Bhanji
P. H. Birks
O. B. Brears
H. P. Brown
F. R. Buckler
C. J. St. Cin
H. P. Dick
A. E. J. Etheridge
R. H. Evans
*H. Greenburgh
J. A. Jones
J. A. Bowen-Jones
W. C. Lawrence
A. B. Lennie
W. B. D. Maile
*N. L. McNeil
*C. M. Norman
R. C. Ponder
D. B. Seymour-Price
T. G. Pritchard
M. A. Shellim
J. V. A. Steytler
R. G. Thomas
J. Y. D. Wakeham
K. H. Walter
E. Williams

* Have completed the examination.

PRE-MEDICAL EXAMINATION.
December, 1938.

Chemistry.

G. C. Christian
R. E. Hyman
D. J. Rayner
H. B. Stebbings
S. H. B. Taylor
R. N. H. Vann
J. K. Yerbury

Physics.

P. C. S. Campion
G. C. Christian
B. H. Dicker
R. P. Lewis
S. H. B. Taylor
R. N. H. Vann
J. K. Yerbury

Elementary Biology.

B. M. Barker
G. C. Christian
B. H. Dicker
T. H. Eustace
R. Middleton
J. L. Silcock

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
January, 1939.

Surgery.

*R. Rowlandson.

Medicine.

*H. B. O. Cardew
*E. S. Nicholson

Forensic Medicine.

*H. B. O. Cardew
*E. S. Nicholson

Midwifery.

E. A. Spouse.

* Have now completed the examination.

Papers by Guy's Men

Barber, H. W. The importance of diet and general treatment in dermatology. *Practitioner*, 1939, cxlii, 1.

Rogerson, C. H. Psychological factors in skin diseases. *Ibid.*, 17.

Mollison, W. M. Laryngology's debt to research. *J. Laryngol. Otol.*, 1939, liv, 1.

King, D. P. The biological test for Hodgkin's disease. *St. Thomas's Hosp. Rep.*, 1938, iii n.s., 68.

Macintosh, R. R., and Another. The Oxford inflator: a simple resuscitator. *Lancet*, 1939, i, 206.

Appointments

A. L. Young, B.M., B.Ch. (Oxon.), Assistant Ophthalmic Surgeon, Princess Alice Memorial Hospital, Eastbourne.

Changes of Address

A. L. Young, B.M., B.Ch. (Oxon.), 11, Devonshire Place, Eastbourne.

Marriages

PRIESTLEY—DAVIES.—On January 14th, 1939, D. A. Priestley to Mary MacDonald, youngest daughter of Mr. and Mrs. Davies, of West Buckland, Taunton.

Births

ALEXANDER.—On January 31st, 1939, at Little Heath, Limpsfield, to Helen (née MacKinnon) and Paul Alexander, B.M., B.Ch., Granville House, Byfleet—a daughter.

Deaths

PAYNE.—On January 31st, 1939, suddenly, at 48, Portland Place, W.1, Joseph Lewin Payne, O.B.E., M.R.C.S., L.R.C.P., L.D.S. (Eng.), of 13, Cumberland Terrace, Regent's Park, N.W.1, and Beltinge, Kent.

BRANGWIN.—On January 29th, 1939, at Swatow, China, Charles Harold Brangwin, M.R.C.S., L.R.C.P.

EDS. { C.H.E. / W.E.Y.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *25th February* 1939 — *Number* 1320

PASSIM

THIS is the time of year when increasing numbers of our friends, after a brief and almost unnoticed absence, reappear among us, like Bottom, changed and translated. For if Bottom had an ass's head and so scared his friends, these fellows are no less of a shock, whose bronzed skin and complacent expression are so different from the pale, careworn face that once we knew, with the cosmetic blemishes that tell of evenings spent in the clinical laboratory, rehearsing for the Residents' Play, or even of less admirable occupations.

But are they healthier, or are we? Too often, after a few days, they disappear again, or are to be seen in the wards with that high swinging pyrexia that only prontosil can mitigate—victims to the first streptococcus that cared to settle in their vaso-pharynx. Perhaps that streptococcus was conveyed to them by us in our well-meaning but bacteriologically spluttering congratulations on their appearance.

Our envy was misplaced. We, our serum teeming with antibodies as only a short residence in the College can concentrate them, have a better right to be called healthy in the environment in which we choose to live and work than they, after all the airs and exercise of Switzerland.

But if we cannot congratulate them on their health, we must envy their experience. For Switzerland seems to be unique in this: that it gives a summer holiday during the winter.

Within twenty-four hours of London, to whose ungracious climate the superiority of the English race is so unfailingly ascribed by historians, is a country where the cold is more bracing than that of an English winter, and the heat of the sun less relaxing, though more penetrating, than that of an English summer. No wonder that the Swiss have had for a thousand years a name for sturdy independence and for centuries contributed the best professional soldiers to the armies of Europe.

Here the long hours spent out of doors, in energetic but not exhausting physical exercise; the heat of the sun when it shines, and the absence of overcoats or underclothes, all create an illusion of summer life.

The love of ski-ing is not hard to acquire. Of all outdoor sports it has the lowest threshold of enjoyment; the beginner on the slopes often has more fun than the expert, cursing himself for being a minute longer than usual on his favourite run, or inveighing against the weather. Nor is ski-ing difficult. The number of proficient French and English, who have ski-ed for only two or three years, at three weeks a year, testifies to that.

So go off to Switzerland, any of you that have the chance, and risk the streptococcus awaiting your return. He will probably get you, whether you go or not.

▭

As we have always said, the glory of the age in which we live is reflected by our daily press, and we had always thought the most perfect image was to be found in the truly magnificent advertisements, more particularly perhaps in those that eulogise the drugs that keep us so fit and healthy. We had assumed, in our ignorance, that this regard for the nation's bodily welfare as shown by the boosting of patent medicines was one of the more recent products of our civilisation. We are wrong. If we had been asked we should have said that a century ago there was nothing comparable, outside the fair-ground, with our modern daily pharmacopœias; in fact we should

have said that in all probability the sufferer of those times would have been forced into the expensive and less efficient method of consulting a qualified practitioner. Now we have had our eyes opened and realise that the strides we have made have not been so rapid after all, that with all our smug self-satisfaction we have to admit that our ancestors were not so comfortless as we had believed.

It was with a proper feeling of awe that we read the front page of a copy of *The Times* of Thursday, November 7th, 1805, and saw there an advertisement for Dr. James' Analeptic Pills, in which they were described as "equally efficacious in all disorders of the stomach, the bowels, indigestion, loss of appetite, habitual costiveness, troublesome flatulencies, and cholics likewise; in gouty habits, in giddiness or rheumatic pains in the head, as well as those occasioned by free living, thereby preventing palsies and appoplexies, so often the consequence of intemperance." There was a list of the therapeutic properties of a panacea that would rival any modern counterpart for dramatic quality, and would cut right down to the conscience of the sufferer, making him fly as fast as his paralysed limbs would carry him to the purveyor of the pills. The advertisement went on to say that "recourse should be had to them on the first attack of a cold, or any slight indisposition, or after any excess of eating or drinking, for promoting longevity." Here was no namby-pamby understatement of fact, but a complete full-blooded account of the uses of these pills that would, we declare, sell like hot cakes to-day. And so we had the mask of conceit snatched from our eyes and saw our own achievements in a new perspective and we knew that we had to forge ahead again until we could face the past with a more confident face.

WE offer our warmest congratulations to Doctor G. A. M. Lintott on his appointment to the Visiting Staff of this Hospital. Doctor Lintott, who succeeded Doctor Boland as tutor to the preclinical class, will commence his duties as Assistant Physician in July of this year.

THE Guy's Hospital Musical Society will give their Second Concert of the season on Wednesday, March 8th, 1939, at 8.30 p.m. in the Physiology Theatre, Medical School, when the choir and orchestra will perform Handel's "Acis and Galatea." This will be preceded by the "Occasional" Overture. Application for tickets should be made to Mr. G. A. R. Winston, the Wills Library, Guy's Hospital, S.E.1, or they may be obtained through any member of the Society: Amphitheatre (reserved), 5*s*. and 2*s*.; Balcony (unreserved), 1*s*.

WE regret that owing to lack of space American Journey has had to be held over for this issue.

Carcinoma of the Breast

By H. J. B. Atkins, Esq. D.M., M.Ch., F.R.C.S.

WHEN the Editor asked me to write an article on carcinoma of the breast, I feared that it might prove too substantial a meal to digest at one sitting. I felt, too, that this dish must have been served up day after day by those responsible for your instruction until you were sick of it, and I believed that if you had not already picked the very bones of this matter, no rehash by me would be likely to commend itself to you. But the subject of carcinoma of the breast lies at the root of all surgery. The elucidation of its causes may open the door to an understanding of the problem of cancer as a whole. Its diagnosis demands the application of the fundamental principles of clinical medicine. Its cure involves in most cases an operation, which, although it can rarely give the same artistic satisfaction as a gastrectomy for carcinoma of the stomach, demands a sound knowledge of anatomy and pathology, and is often crowned, unlike gastrectomy for cancer, with the garland of permanent cure.

PATHOLOGY

We find in carcinoma of the breast that the epithelial cells lining the ducts or terminal ductules in response to some stimulus or to the removal of some inhibiting factor or to both, take on the property of unlimited and uncontrolled growth. Sometimes this "derestriction" is formidable; then the cells become spheroidal in shape, spread rapidly in every direction and swarm over the whole gland, eventually engulfing the patient. Sometimes the process is less virulent, the cells retain their columnar form, their march is more sedate, but in the end equally inexorable. Numerous attempts have been made to classify cancer of the breast on a cytological basis. Although

these attempts have not led to the over-classification that is the case in chronic mastitis, it is possible that they have introduced unnecessary complications. All malignant neoplasms of the breast epithelium conform to one fundamental code of behaviour. In some cases there is a relatively large amount of fibrous tissue and the carcinoma on that account is referred to as a " scirrhus." An extreme example of this type is seen in the so-called " atrophic scirrhus," the slow-growing fibrotic neoplasm of the elderly. In other cases the epithelial activity overshadows the fibrous tissue and the soft feel of these lumps and their cellular nature earns for this type of growth the name of " medullary cancer." There is little difference in the degree of malignancy between the medullary and the scirrhous growths. However, with the exception of the atrophic scirrhus, which is the least malignant, scirrhous growths are on the whole more malignant than medullary. Other cytological labels such as " adenocarcinoma" and " colloid carcinoma " are applied when the epithelial pattern imitates natural formations or undergoes specific degeneration.

There are, in addition, two classes of breast cancer which require separate mention. The first is Paget's disease of the nipple (Fig. 1) in which an eczema of the nipple is associated sooner or later with a cancer of the underlying breast tissue, and the second is the columnar-celled carcinoma. The venomous sallies of Arian and Trinitarian pale into insignificance in face of the acerbity of pathologists over the problem of Paget's disease of the nipple. The point at issue is whether the eczema irritates the breast and causes the cancer or whether the cancer appears first and (cancer cells spreading out into the tissues of the skin) gives rise to the so-called eczema. If the cancer comes first, how then can the eczema be present for many years without the cancer being apparent? If, on the other hand, this be a true eczema, why does it practically invariably cause cancer of the breast and scarcely ever cause cancer elsewhere in the body? At that I shall leave the problem. That Paget's disease is associated with cancer and demands radical treatment is the practical issue.

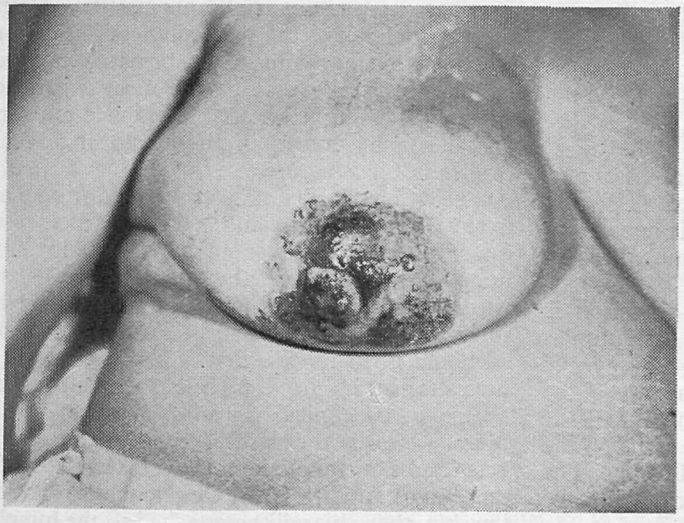


Fig. 1.—Case of Paget's disease of the nipple.

Columnar-celled carcinoma is sometimes called duct carcinoma, but pathological opinion tends now to ascribe all mammary cancers to malignant neoplasia of the ducts or ductules, so that the term " duct carcinoma " applied to columnar-celled cancers alone is an undesirable one. Its tendency to spread preferentially within the ducts is probably related to its low malignancy, which prevents its tumultuous overflow into the surrounding interstitial tissue as is the case with the more malignant spheroidal-celled growths. It is differentiated histologically from papilloma if it can be shown that some of these cells have transgressed the boundaries of the ducts and are found lying in the surrounding tissue. It is a slow-growing tumour carrying with it a fibrous tissue stroma bearing blood vessels. Being largely inside the duct wall and frequently vascular it gives rise to bleeding from the nipple, and this sign may be the only evidence of disorder, although usually a lump can be palpated.

Carcinoma of the breast tends to spread by direct invasion and metastasis. As it encroaches on the surrounding tissue the skin, the nipple and the pectoral muscle become involved. Cancer cells reach the axillary and later the cervical lymph glands by way of the lymphatics. The mediastinum may be invaded and the liver involved through the falciform ligament. Metastases may occur in the bones, particularly the femur and the thoracic spine. Fig. 2 illustrates a typical ostelytic deposit in the lower end of the femur.

CLINICAL

Carcinoma of the breast occurs almost exclusively in women and at a relatively early age. Dean Lewis and Rienhoff (1932) found in 950 cases that the maximum age incidence was 47. The patient usually complains of having noticed a

lump in the breast which, at least at first, was painless, and the condition is often ignored on that account. There is generally no history

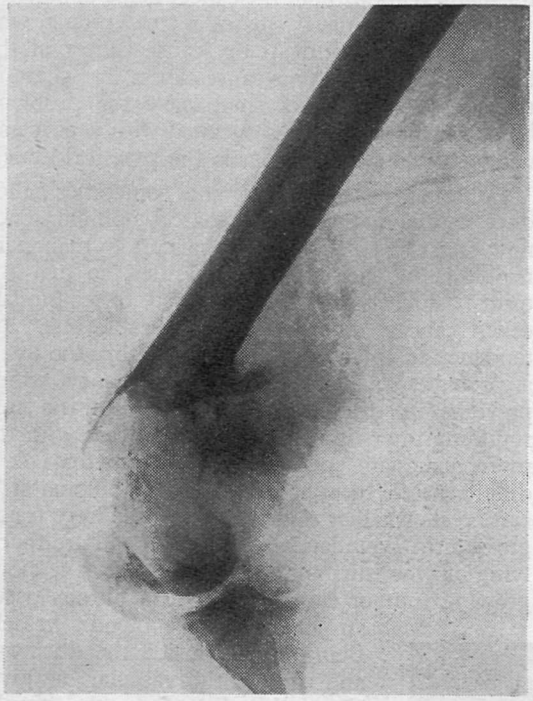


Fig. 2.
Deposit in lower end of femur.

suggesting mastitis previously, and a history of cancer of the breast in any member of the family is not strikingly common, although it appears to be less uncommon than can be accounted for by coincidence.

In an examination of the breast attention is directed first to observing whether the nipples are on the same level and are facing in a normal direction, whether there is any retraction of the nipple or deformity in the natural contour of the breast, and whether there are dilated veins on the chest wall or a pink erythematous suffusion. The breasts should next be palpated, starting with the side opposite to that on which there are symptoms. A good method is to examine the breasts and their lymphatic fields as shown on the accompanying diagram (Fig. 3). This plan, although it does not follow the natural spread of the disease, at least ensures that nothing shall be omitted. Particular attention should be paid to the axillary glands which lie on the first intercostal space and the second rib, as enlargement of these is often missed. Attention is now directed to the lump itself. This varies in size and shape, is stony hard if scirrhous and soft if medullary. Its edge is relatively well-defined from the rest of the breast tissue, and this feature, with the fact that it is free from tenderness and is usually firmer, tends to distinguish it from a lump of chronic mastitis, where the edge is very ill-defined. A further important point of differen-

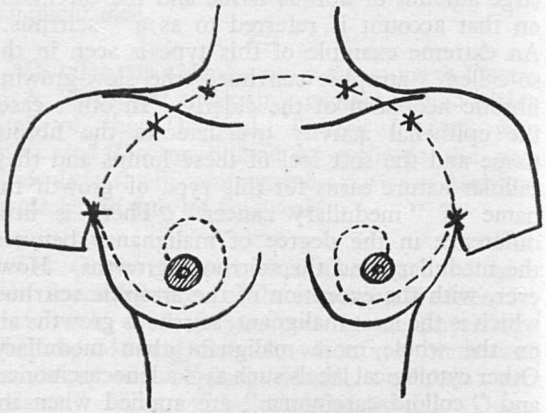


Fig. 3
Method of examining a breast case.

tiation is that a carcinoma is felt equally as well with the flat of the hand as when it is pinched up between the finger and thumb, and this is not usually so with a lump of chronic mastitis. Despite these differences, the difficulty of being sure whether a single lump in the breast is cancerous or mastitic is so great that the most experienced surgeons make it an invariable practice to operate on all solitary lumps in the breast in order to determine their nature.

The differentiation of cancer from fibroadenoma is not usually very difficult. The age incidence is much lower in fibroadenoma, and the edge of the lump is so well-defined that you can be sure within a millimetre which is lump and which is surrounding breast tissue. Further, a fibro-adenoma is so mobile that it slips about in the breast something like a piece of ice in a tumbler.

The other clinical signs of carcinoma of the breast are really the signs of spread, and to get the best results operation should have taken place before these signs appear. If the carcinoma has spread to the skin, then this will be attached to the lump. It may be said that, with very few exceptions, lumps in the breast which are attached to the skin are carcinomatous. Fig. 4 illustrates the best method of demonstrating skin attachment by pinching on either side and noting the dimple of skin being drawn down over the lump. Attachment may occur to the nipple retracting or deforming it, or the lump may become fixed to the fascia over the pectoral muscle, a feature which can be demonstrated by getting the patient to press her hand

hard on her hip, thus fixing the pectoral muscle, and then trying to move the lump in the direction of the pectoral fibres. Sometimes the skin and underlying lymphatics are involved for some distance around the lump when an " orange skin " appearance is seen. Localised lumps in the skin far away from the primary site may be detected, indicating the so-called spread " *en cuirasse*."

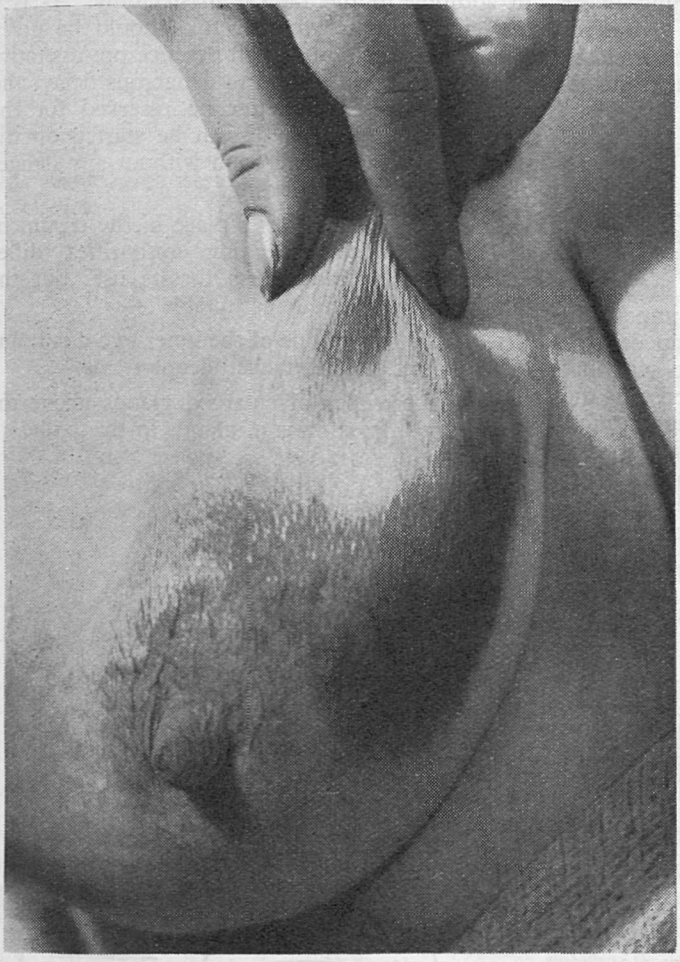


Fig. 4.
Method of demonstrating the attachment of a lump attached to the skin.

The state of the lymphatic fields has already been noted and it remains to examine the arms and forearms to see whether there is any œdema from lymphatic obstruction, to palpate for enlargement of the liver and to examine the underlying thorax, particularly if there has been a history suggesting recent pleurisy from thoracic involvement.

TREATMENT

We must first consider the treatment of the doubtful lump in the breast, remembering that, with the exception of most fibro-adenomata, all solitary tumours of the breast are doubtful. It is agreed that some preliminary operation must be performed upon these, followed, if necessary, by a radical mastectomy, but there is considerable diversity of opinion as to what that preliminary operation should be. There is a choice of three alternatives: The lump may be incised *in situ*, it may be removed with some surrounding breast tissue, or the whole breast may be removed. The first is the simplest, but it suffers from the difficulty that in any really doubtful case the lump cannot be "toyed with," sectioned and resectioned in a good light as is possible when it is removed from the body, and for this reason I prefer the second alternative of removing the lump with some surrounding breast tissue and taking it away to a nearby table where it can be examined thoroughly. The third alternative has something to be said for it. In the first place, if the disease turns out to be carcinoma, then the line of tissue division has taken place well away from the site of the growth, and if it turns out to be chronic mastitis then if, as is often the case, the tumour removed is only a more advanced stage of a disease which has affected the whole breast, a radical cure has been accomplished. The trouble is that few patients will consent to an operation of this magnitude for a local condition unless it is absolutely necessary, and in such a case necessity cannot be pleaded. Whichever preliminary operation is decided upon, radical mastectomy should follow any suspicion of malignancy, so that without alarming her the patient's consent to such a procedure must be obtained before the preliminary operation, as the second stage must be carried out forthwith after a change of gloves and instruments.

In order to tell whether a lump removed from the breast is cancer or due to chronic mastitis, the table on the next page may be helpful.

Before discussing the treatment of the established case of breast carcinoma, there is one symptom, that of bleeding from the nipple, which must be

Cancer.	*Mastitis.*
Cuts like a gritty pear.	Cuts with a rubbery feel.
The cut surface is concave.	The cut surface is flat or convex.
Blood or altered blood pigment stains the section.	Cysts containing clear fluid are present. Putty-like material can be expressed from dilated ducts.

considered separately. Bleeding from the nipple can be caused by a trivial lesion of the breast such as an epithelial desquamation within one of the ducts, by a duct papilloma, or by a serious lesion such as a duct carcinoma. If the only indication of abnormality is bleeding, it may be impossible to decide whether the cause is an innocent or malignant one. In general, it may be said that the older the patient and the more persistent the symptom, the more sinister is the significance. In order to overcome the practical difficulty of treatment, I have set myself the following rule, which works as well as any other. Mr. Davies-Colley tells me that this scheme errs on the side of severity. It would take up too much space to discuss this question fully here, and I therefore give you the scheme as I use it, hoping that you will improve on it in the light of further experience of these cases.

The patient is under the age of 35 years :—

A. *No lump.*—If the bleeding persists for, or recurs after, six months—total mastectomy. If the bleeding ceases without recurrence—keep under observation.

B. *Lump present.*—Remove that segment of breast, sparing as much of the nipple as possible. (A radical mastectomy would only be required if the lump gave evidence of malignancy.)

Patient 35-45 years :—

A. *No lump.*—If the bleeding persists for, or recurs after, four weeks—total mastectomy.

B. *Lump present.*—Total or radical mastectomy. (Depending upon site and qualities of the lump.)

Patient over 45 years :—

A. *No lump.*—Total mastectomy.

B. *Lump present.*—Radical mastectomy.

Despite the very interesting work of Keynes and the increasing efficacy of radiation therapy, the mainstay of treatment of the established case of breast cancer is radical mastectomy. The details of this operation do not concern us here, but there is one essential quality which must be insisted upon, and that is that sufficient skin is removed to ensure that the line of skin section passes at a distance of 3 inches from any obvious focus. The aim of radical mastectomy is not to provide a cosmetic scar, but to cure the disease, and if necessary any skin defect can be subsequently made good by a Thiersch-graft.

Deep ray therapy should be given as a routine in addition to the radical mastectomy. It is a matter of dispute whether this should be given before the operation, but in practice pre-operative radiation is found to lead to dangerous delay, and such treatment had better be reserved for the post-operative period. It can be started on the tenth day after the operation without any danger of interference with healing.

Interstitial radium has a place in the treatment of breast cancer. Leading authorities differ widely in their indications for its use, but the following are generally acceptable :—

1. If the lump is one of the inner two quadrants of the breast and is attached deeply.

2. The presence of enlarged glands above the clavicle or a fixed mass of glands in the axilla.

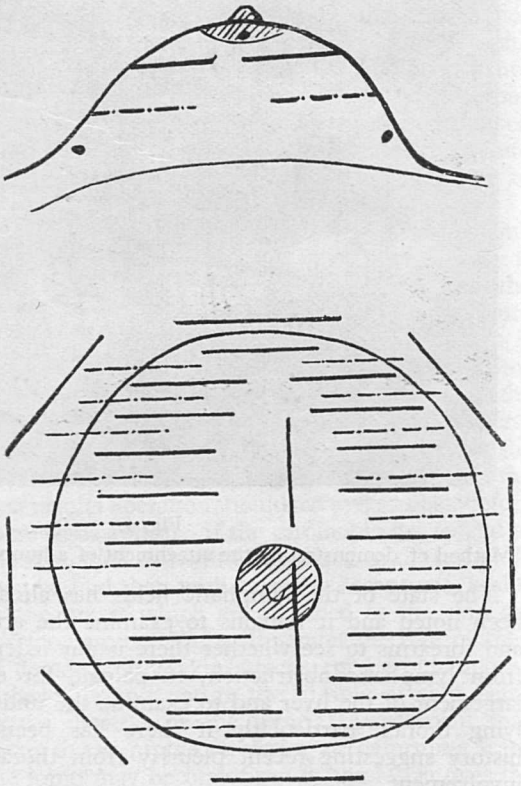


Fig. 5

A method of needling the breast.

3. Involvement of the skin to such an extent that more than six square inches would require to be made good by grafting after the flaps had been fashioned.

If any of these conditions obtain, interstitial radium is employed. The plan for irradiating the breast and its glandular field varies from case to case, but should conform to the following general principles: Needles should be arranged in the breast parallel to each other in two tiers, this system being encircled at the periphery by needles placed at right angles to the axes of the breast, as shown in Fig. 5. The axilla should contain needles arranged in a column projecting towards the apex and covering all four walls equally, while some needles are inserted above, below and behind the clavicle (Fig. 6). The breast should receive

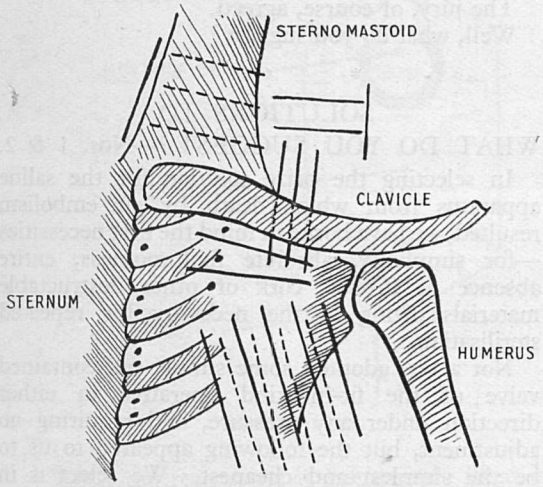


Fig. 6

A method of needling the axilla and supraclavicular regions.

about 100 mgm. and the axilla and clavicular regions about 50 mgm. In addition, small needles may be inserted into the intercostal spaces alongside the sternum. This strength of radiation should be kept up for seven or eight days. Brachial neuritis from chance insertion of a needle close to a nerve trunk or damage to the axillary vein does not in practice occur (Hutchinson, 1935), but the treatment is a very painful one whilst it lasts, and some pain in the irradiated field may persist for a long time.

Finally, there are the cases with metastases in the liver, lungs, bone or other distant focus. For such, deep ray therapy may be advised and may help to delay the spread of the disease, as well as relieving some of the pain. In these patients morphia should be prescribed in sufficient doses to allay pain and anxiety.

PROGNOSIS

In regard to the outlook of these patients, we may say that cancer of the breast stands as good a chance of permanent cure as cancer of any other organ coming within the orbit of the surgeon as distinct from the gynæcologist. If we were all perfect doctors and we had patients who came to see us as soon as they detected anything wrong, cancer of the breast would be a curable disease in the vast majority of cases. It is difficult to give exact figures as to prognosis seeing that this depends on the skill of the surgeon or radiotherapist in charge of the case. The best figures which I have seen published are those of Gordon-Taylor (1938), who performs radical mastectomy whenever this is possible. The figures of those who treat all carcinomata of the breast by interstitial radium without regard to the indications given above are, on the whole, nearly, though not quite, so good as the figures for radical mastectomy. In general, and at some sacrifice of accuracy for the sake of simplification, we may say that if the axillary glands are involved, either clinically or microscopically, the chances of a five-year survival are 20 per cent. If the axillary glands are not involved, the five-year survival rate is 80 per cent.

So we come to the end of this review. You will have seen, I hope, how the subject of carcinoma of the breast is like a sample taken from the cask of surgery. I am aware that we have only sniffed at this sample, but to do otherwise would have involved writing a book and not a short article for the *Gazette*. In attempting to put the facts before you in a clear fashion, I have had to make sharp divisions where none exists in Nature. I have had to say: If the patient be under the age of 25 you will do this, if over 35 do that, or: No more than six square inches must be made up by grafting, but the alternative is to resort to such vague terms as "young," "old" and "middle-aged," terms over the value of which examiner and candidate are sometimes in grave disagreement.

When you come to deal with a case in practice, you will have to interpret precept with common sense, and perhaps one would find it difficult to end an article on a surgical subject with more suitable advice.

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Hutchinson, R. A. *Brit. J. Surg.*, 1935, xxii, 465.

Lewis, Dean and Rienhoff. *W.F. Ann. of Surg.*, 1932, iii, 336.

What Do You Suggest ?—No. 3

(The third of a series of practical problems illustrating tragedies that have actually happened, and inviting suggestions that might prevent their recurrence. The Editor offers a prize of one guinea for the best solution sent in to him at the " Gazette " Office, Guy's Hospital, on or before Thursday, March 2nd. Please mark the envelope on its top left-hand corner with the inscription, " What Do You Suggest ? "

YOU may think that Mrs. le T. must have been particularly stupid to interpret in the way she did the instructions printed on the yellow card given to her to confirm an appointment for circumcision for her little boy. You might say, as in fact the Coroner did, that it was almost inconceivable that such crass stupidity should be allowed for in any way ; yet the fact remained that Mrs. le T. was not uneducated, that she had read the instruction properly and had interpreted them in a particularly literal manner, and that it was because she had " obeyed " the instructions given —to the letter—that her little boy came to his death.

Let us tell you how it happened, and you shall judge for yourself whether some other precaution or substitution should be adopted—if only to allow for persons of the le T. kind.

Mrs. le T. took the yellow card out of her bag the night before John was to go up to hospital for his operation, and read as follows : " No solid food to be taken after 7.0 a.m. on the morning of operation." She took it that the instructions had been made to allow infants to get something down before undergoing the ordeal, and in fact it was so. Starved children are poor subjects for any trial of their strength, and this instruction had been designed to allow children coming up for circumcision to have some reserve, yet to allow reasonable time for a reasonable early feed to become emptied from the stomach.

Unfortunately, Mrs. le T. construed the instruction in a manner which, though kind and thoughtful in its way, was hardly common sense. Punctually at 7 a.m. she gave the child—just 2½ years old—a pint and a half of the best gruel, with milk. You appreciate that the child's stomach was distended to the full, and being so distended could sum up but the faintest emptying waves. It was still almost as full at 8.45 when they left home, and hardly less full when they carried John into the Out-Patient Theatre at 9.30 a.m.

We hardly need to relate what happened. The Casualty Officer who was giving the anæsthetic that morning knew nothing about John's meal of porridge, and proceeded to induce with ethyl chloride in a justifiably confident manner. Just 30 second later John was dead, with vomit appearing at the nostrils, and the glottis and (as post-mortem revealed) main air passages blocked solidly with gruel. John had been in no fit state to have an open anæsthetic.

The Coroner remarked to the jury, after hearing the evidence : " Gentlemen, there is no one among us who can afford to blame Mrs. le T. for her action. She only did what she thought was right. *But, gentlemen, should it remain possible for other persons to misinterpret the wording on this card ? Do you not think it clearly proper for the wording of these cards to allow of no ambiguity ?* "

The jury, of course, agreed.

Well, what do you suggest ?

* * *

SOLUTIONS TO WHAT DO YOU SUGGEST ?—Nos. 1 & 2.

In selecting the prize solution for the saline apparatus from which death by air embolism resulted, we have borne in mind the first necessities —for simplicity, absolute foolproofness, entire absence of rubber, cork or other destructable materials owing to the necessity for repeated sterilisation.

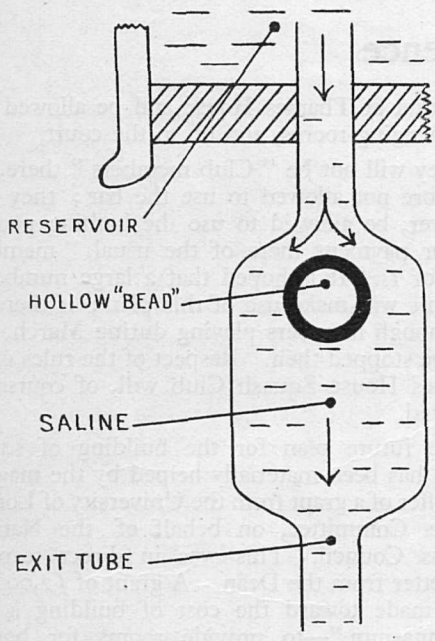
Not a few adopted some simple self-contained valve of the fit-in kind operative in either direction under any pressure, and requiring no adjustment, but the following appeared to us to be the simplest and cheapest. We select it in preference to the more complicated carburettor type of float and needle of which one reader sent in a perfect model !

Winning solution of Problem No. 1
by Mr. J. D. Buxton.

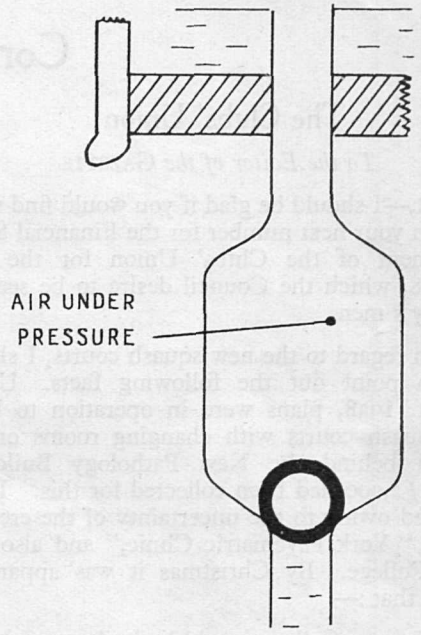
The sketch shows a glass tube, resembling a small pipette, which contains a hollow glass " bead." The " bead " is of such a size as to fit over the exit tube as shown in the second figure, and aided by the saline residue form a gas-tight seal.

As the device is placed immediately below the reservoir, saline when occupying the container will also be found in the whole system of tubes. The " bead," being less dense than saline, will float at the upper end of the glass tube, and any flow from a minimum of an intermittent drop to a maximum, will pass from the reservoir down around the " bead " and out through the outlet tube.

When the level of the saline falls the " bead " floats down to the lower end of the tube. Here it will take up the position already described (shown in the second figure) and prevent the air, under pressure above, from flowing after the saline and ultimately entering the blood stream. Incidentally, the greater the pressure of air in the reservoir, the more air-tight will be the seaitng of the head over the outlet tube.



Normal Flow.



Interrupted Flow.

When the reservoir has been newly filled and the tubes contain air, the flow of saline may be commenced by tilting the reservoir to one side, when the " bead " will roll from its seating over the outlet tube.

Sterilisation is a simple procedure and can be repeated indefinitely without affecting the reliability of the apparatus.

Devices for the control of gas, in solution of No. 2, relied mainly on light, rather delicate, and therefore slightly unreliable spring or magnet controlled valves with a finger release, or upon heat control. The most perfect little model of the latter is published below :—

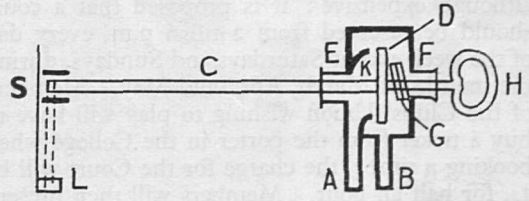
Winning solution of Problem No. 2
by Dr. J. W. Shackle.

Robert Koch invented a device to turn off the gas of an incubator if the by-pass failed to relight it, and I have a vague recollection of hearing of a similar device for gas fires and rings quite recently. It is fairly evident that such devices much depend upon the heat generated, as a device depending on failure of pressure in the pipe would not only have to be too sensitive and therefore unreliable, but would also be likely to cut off the gas in the event of a large demand in the house, leading to a fall in pressure.

The simplest device for this purpose would depend upon the expansion of a long brass rod passing behind the row of burners of the fire or the bending of a bimetallic strip.

The brass rod C passes across the back of the fire behind the burners. At one end it rests in a socket S. The other end passes through the control box via the glands E and F to terminate in a ring H. Mounted on this rod is a disc D (fixed to the rod), which is normally kept pressed against the large port K, closing it, by means of the spring G.

Operation.—Gas enters through the tube B, but cannot leave till the ring H is pulled and held, when gas can pass through the port K and out at A to the burners. When enough heat has



been generated to make the rod expand, the ring H can be let go, when the disc D will be held off its seating by the expanded rod.

Where it is not possible to accommodate a long rod like C, the end at S may be attached to a stout bimetallic strip as shown dotted at L. This will bend when the ring H is pulled, but will not remain bent enough to open the port K until it has become heated by the fire or gas-ring.

The trouble with all these devices is that the public regards them as a nuisance and will always find some way of foiling them—by tying them up or the like. " Gegen der Dummheit kampfen die Götter selbst vergebens."

Correspondence

The Clubs' Union

To the Editor of the GAZETTE

SIR,—I should be glad if you would find space in your next number for the Financial Statement of the Clubs' Union for the year 1937-38, which the Council desire to be seen by all Guy's men.

With regard to the new squash courts, I should like to point out the following facts. Up to August, 1938, plans were in operation to build two squash courts with changing rooms on the ground behind the New Pathology Building; nearly £2,000 had been collected for this. Delay occurred owing to the uncertainty of the erection of the " York Psychiatric Clinic," and also of a New College. By Christmas it was apparently settled that :—

1. No new College would be built at once.

2. The Psychiatric Clinic should definitely be erected, and on a site which is still being discussed by the Hospital and the " York Trust " architects. Just how much room will be left for the Clubs' Union requisites is not apparent as yet.

3. The extension to the Nurses' Home be started on the 1st March, and the squash court therefore closed from that date.

The Clubs' Union Council were naturally perturbed about the forthcoming loss of the squash court for an indefinite period of time. Inquiries have been made into the possibility of hiring a squash court in the neighbourhood. One at Thames House, Millbank, is the most suitable although expensive; it is proposed that a court should be reserved from 2 till 6 p.m. every day of the week except Saturdays and Sundays, during the months of March, April and May. Members of the Clubs' Union wishing to play will have to buy a ticket from the porter in the College when booking a time; the charge for the Court will be 1*s*. for half an hour. Members will then present the ticket at Thames House and be allowed into the changing-rooms, and on to the court.

They will not be " Club members " there, and therefore not allowed to use the bar; they will, however, be allowed to use the bathing pool on further payment there of the usual " member's fee " of 1*s*. It is hoped that a large number of students will make use of this plan; if there are not enough members playing during March, play may be stopped then. Respect of the rules of the Thames House Squash Club will, of course, be expected.

The future plan for the building of squash courts has been materially helped by the magnificent offer of a grant from the University of London Grants Committee, on behalf of the National Fitness Council. This was in direct response to a letter from the Dean. A grant of £2,000 has been made toward the cost of building a new " gymnasium "—to provide rooms for boxing, fencing, ju-jitsu and other indoor sports. Plans for a new building are being produced now which will accommodate both this and the two squash courts; if possible, a Rugby fives court will be included. Uncertainty remains as to when the building will be ready for use. Evacuation of the present gymnasium will enable the smoking-room, or " Spit," to be greatly enlarged.

It is hoped that more definite details of this new building will be forthcoming shortly.

Efforts have been made to obtain one of the class-rooms in the old Pathology Building for use as a " recreation room " for table-tennis play, etc., but, unfortunately, there has been no success up to date on account of difficulties concerning the rating tax.

Yours, etc.,

I. G. ROBIN,

Hon. Secretary,

Guy's Hospital Clubs' Union.

Guy's Hospital,
S.E.1.

Guy's Hospital Clubs' Union

BALANCE SHEET, 31st AUGUST, 1938

	£ s. d.	£ s. d.	£ s. d.
SUNDRY CREDITORS—			
Accounts owing at date			184 11 7
RESERVE FUND—			
As per last Account			600 0 0
BEDDARD PRIZE FUND—			
As at 31st August, 1937	18 6 3		
Receipts during the year	3 14 4		
	22 0 7		
Less Payments during the year ..	4 9 10		
		17 10 9	
LAIDLAW PRIZE FUND—			
As at 31st August, 1937	0 6 4		
Receipts during the year	2 16 6		
	3 2 10		
Less Payments during the year ..	2 16 6		
		0 6 4	
SQUASH COURTS REBUILDING FUND—			
Amount Received during year from *Guy's Hospital Gazette*		400 0 0	
GUY'S HOSPITAL BOAT CLUB—			
Boat Fund Donations		3 5 6	
GUY'S HOSPITAL RUGBY FOOTBALL CLUB—			
Rugby Club Tour—Unexpended Balance of Grant		19 6 2	
			440 8 9
SQUASH COURT MAINTENANCE ACCOUNT—			
Balance as at 31st August, 1937 ..		46 18 8	
Add Meter Receipts.	78 12 0		
Garage Rents	13 3 10		
		91 15 10	
		138 14 6	
Less Rent of Squash Court.. ..	50 0 0		
Cost of Electricity	11 11 5		
Cost of Cleaning	22 12 8		
Cost of Maintenance	9 1 9		
		93 5 10	
			45 8 8
REVENUE ACCOUNT—			
Excess of Income over Expenditure for the year ended 31st August, 1938		566 19 10	
Less Balance at 31st August, 1937..		184 5 6	
			382 14 4
			£1,653 3 4

	£ s. d.	£ s. d.	£ s. d.
CASH—			
On Deposit and Current Accounts—			
Allocated to various Funds as per contra ..	440 8 9		
Available for General Purposes	453 13 8		
In Hand	8 0 9		
			902 3 2
INVESTMENTS FOR RESERVE FUND—			
£630 9*s.* 8*d.* New Zealand Government 3½ per cent. Consolidated Stock 1940, at cost as per last Account			600 0 0
DEPOSIT FOR TELEPHONE CALLS			2 13 1
SUNDRY DEBTORS—			
Amounts due at date			119 3 9
STOCK OF RAILWAY TICKETS			29 3 4
			£1,653 3 4

We have audited the attached Balance Sheet and Revenue Account of the Guy's Hospital Clubs' Union as at 31st August, 1938, with the books and vouchers of the Clubs' Union and find them to be correct and in accordance therewith.
In respect of the Receipts from the Gate and Stand we have accepted the certified accounts of Mr. Charles E. Rose.

(*Signed*) KEMP, CHATTERIS, NICHOLS, SENDELL & CO.,
Chartered Accountants,
26, Walbrook, E.C.4.

8*th December*, 1938.

Guy's Hospital Clubs' Union

REVENUE ACCOUNT FOR THE YEAR 1937-38, AS COMPARED WITH 1936-37

	1936-37. £ s. d.	1937-38. £ s. d.
To GROUND EXPENSES—		
Wages of Groundsmen	419 1 7	447 9 7
Rent of Grounds—Honor Oak Park	465 0 0	465 0 0
" " University of London	151 1 0	150 10 6
Income Tax, Schedules "A" and "B"	93 11 6	98 10 0
General Rates and Water Rate	162 3 0	173 19 8
Gas and Electricity	23 9 8	24 14 1
Insurance	39 10 3	41 2 11
Telephones	3 7 2	6 8 2
General Repairs	67 14 1	43 14 1
Petrol and Oil for Mowers	23 1 3	20 8 3
Repairs to Mowers	29 8 6	37 8 3
Turf, Seed, Manures, etc.	109 14 1	137 13 6
Sand	40 10 9	12 12 0
Coke	35 4 8	36 10 2
General Expenses at Ground	35 0 6	22 18 11
" GRANTS TO CONSTITUENT INSTITUTIONS—		
Association Football Club	48 14 3	44 6 7
Athletic Club	53 14 7	51 19 11
Boat Club	46 2 6	86 0 0
Cricket Club	70 15 9	58 6 3
Debating Society	—	4 6 0
Dental Society	31 12 3	28 12 4
Fives Club	—	2 10 0
Golfing Society	12 15 3	24 18 9
Hockey Club	73 17 2	83 8 0
Ice Hockey Club	30 10 0	52 0 0
Lawn Tennis Club	7 6 11	25 5 5
Miniature Rifle Club	4 0 0	4 3 6
Pavy Gymnasium	137 0 9	51 9 9
Physical Society	2 7 1	21 1 0
Rugby Football Club	203 9 10	202 5 7
Rifle Association	40 13 6	20 8 4
Sailing Club	33 3 7	34 19 6
Students' Club	734 12 3	600 0 0
Squash Club	12 19 10	15 0 0
Swimming Club	19 0 9	18 0 8
" FARES AND TRAVELLING EXPENSES—		
Association Football Club	9 8 3	20 3 1
Association Football Club Tour	26 0 0	—
Cricket Club	7 18 0	8 9 4
Carried forward	£3,304 0 6	£3,176 14 1

	1936-37. £ s. d.	1937-38. £ s. d.
By SUBSCRIPTIONS received during year	4,149 9 6	4,156 4 6
" SUNDRY RECEIPTS—		
Grant from Medical School	200 0 0	200 0 0
Grant from Dental School	100 0 0	100 0 0
Rents from Tenant	100 0 0	100 0 0
Grant from Guy's Hospital College Catering Company, towards Students' Club Rent	100 0 0	100 0 0
Fees for Hire of Ground	3 3 0	—
Interest on Bank Deposits	1 10 10	0 17 7
Locker Rents	2 10 0	1 15 0
Share of Receipts from Ice Hockey Machine in Pavilion	4 2 0	1 14 7
" INTEREST ON INVESTMENTS—		
Reserve Fund	16 13 10	16 5 6
" NET GATE AND STAND RECEIPTS	67 12 0	107 17 9
	4,745 1 2	4,784 14 11
" BALANCE, being Excess of Expenditure over Income for the year	287 5 5	—
Carried forward	£5,032 6 7	£4,784 14 11

Brought forward	£3,304 0 6	£3,176 14 1
Dental Society	7 10 9	—
Fives Club	—	3 2 8
Golfing Society	2 4 0	5 18 0
Hockey Club	16 12 6	28 3 6
Hockey Club Tour	24 0 0	—
Lawn Tennis Club	1 2 0	3 12 0
Rugby Football Club	252 18 10	203 16 9
Rugby Football Club Tour	75 0 0	60 0 0
Sailing Club	24 0 0	9 8 1
Swimming Club	0 11 0	—
To SECRETARIAL EXPENSES—		
Office Salaries and Superannuation ..	99 2 9	107 7 4
Printing and Stationery	7 16 4	10 0 0
„ SUNDRY EXPENSES—		
Guy's Hospital Gazette (Students) ..	296 17 3	297 2 9
„ „ „ (Staff) ..	57 15 0	58 17 6
Pensions—Groundsman	78 0 0	78 0 0
„ Secretarial	16 13 4	16 13 4
Audit Fee	7 7 0	7 7 0
Insurance of Cups	3 15 0	3 15 0
Income Tax—Schedule "D" ..	2 19 4	—
Sundry Expenses	33 5 3	19 18 1
University of London Athletic Union	18 15 0	15 15 0
Table Tennis Equipment	19 0 10	10 0 11
„ STORE ROOM UNDER STAND ..	388 5 8	—
„ POSTS AND CHAINS IN FRONT OF STAND	33 0 0	—
„ ENCLOSING ENDS OF STAND ..	69 5 3	—
„ NEW FENCING	102 7 6	—
„ NEW BEARERS AND BATTENS FOR TUB ROOM	22 10 0	—
„ NEW SEATS FOR GROUND ..	9 10 4	—
„ ALTERATIONS TO LIGHTING IN DINING-ROOM	15 5 4	—
„ RIFLES FOR MINIATURE RIFLE CLUB	32 3 0	—
„ NEW WIRE FENCING	10 12 10	21 3 4
„ FIRE EXTINGUISHERS	—	14 17 0
„ PAINTING SEATS AND SUPPORTS ON STAND	—	66 2 9
	5,032 6 7	4,217 15 1
„ BALANCE, being Excess of Income over Expenditure for the year ..	—	566 19 10
	£5,032 6 7	£4,784 14 11

Brought forward	£5,032 6 7	£4,784 14 11
	£5,032 6 7	£4,784 14 11

The Residents' Play, 1939

Reviewed by "Last-Nighter"

THE desirability of allowing the "Niggers" to lapse this year is open to question, but there can be no doubt that the Residents' Play justified its continued existence. The production, the acting, the dialogue, the lyrics and the music were of a uniformly high standard and combined to provide an appreciative audience with a thoroughly enjoyable evening.

In accordance with tradition the plot was based on the eternal triangle theme. The heroine, Nurse Ann A. Plasia, is engaged to the President of the Residents, Luke O. Plakia, a young man of high ideals, but lacking, to her mind, the ability to put his words into action. To incite him to do something about the dreadful living conditions in the College, for instance, she stirs him to jealousy by recounting the attentions bestowed upon her by Dr. Bonydear, to whom she has hinted that she might give her hand should he ever do something really great, such as discover the cure for cancer. He at any rate proves himself to be a man of action, and things soon begin to happen.

The Superintendent is kidnapped by a couple of thugs under the very noses and uplifted hands of his colleagues just as he is about to make the public announcement of a scheme by which Guy's may be freed from debt for all time. The Senior Surgeon disappears. A College waitress gets burned in the A.R.P. dug-out underneath the College. The hero keeps on having an idea and dashing off the stage. An operation to be performed by the Senior Surgeon on the burnt College waitress takes place, but after employing a technique so extraordinary as to arouse the suspicions of his colleagues Grock and Ratkins, the surgeon is unmasked by the hero in the nick of time and turns out to be the villain Bonydear. The patient comes round from the anæsthetic and is found to be the Superintendent and not the College waitress. (No explanation is offered as to how Dr. Shrink succeeded in inducing anæsthesia without even noticing the sex, let alone the identity, of his victim; the crossword must have been especially absorbing that day!) In vain Bonydear begs to be allowed to explain, and we see him next on trial.

The hero, in his evidence, tells how, on the evening on which the Superintendent was kidnapped, he had overheard the waitress make a date to meet her young man, the porter, in the A.R.P. dug-out, the earthy walls of which gave off a weird, phosphorescent light. Deciding to explore, the hero found the dug-out communicating with an underground dungeon beside the river. Here lay the Senior Surgeon gagged and bound. The dungeon was in the process of being flooded, and Luke was only just in time to save poor old Daisy's-Dolly from a watery grave. The case against Bonydear looks black, and here is Ratkins in the witness box to clinch the matter. Just as he is about to give his evidence, however, he is called away by an S.O.S. from the B.B.C. to attend a railway accident at Charing Cross. The principal witness gone, the case falls to the ground and the prisoner is dismissed.

"Just a Little White Bow"

When next we see him he is receiving the congratulations of the nurses on the roof garden of their new Home, and it looks as though villainy will go unpunished, but the hero has had another of his ideas and enters leading in Spike, who kidnapped the Superintendent, and whom he found lurking in the bushes. Spike recognizes

by his voice the Boss, whom he has never *seen* but has *heard*. Thus exposed, Bonydear makes a final attempt to save himself and denies all knowledge of Spike, who draws his rod and croaks him. With his dying breath, echoing the sentiment of Charles II, Bony mutters, " Don't let Poor Whiting starve."

The hero and heroine fall into one another's arms, and the finale, that misguided relic of tradition, that uncomely conglomeration of swaying arms and legs, is just about to start, when the body of Bonydear raises itself to a sitting posture and demands to be allowed to join in. Even this uncalled-for anti-climax cannot deprive me of the pleasant memories of the evening's excellent entertainment.

" From Darkest Prison Cell "

The plot was ingenious and perfectly logical, but seemed to be mishandled at times. It took a long while to get under way, and the first two scenes dragged in consequence. Spike and Bill, the hired thugs, were not provided with a sufficiently sinister *raison d'etre*, and their kidnappings and third-degree activities appeared to be dictated more by their own whims than by that mysterious and unseen force, the Boss. This was particularly true of the scene in the disused wharf in Wapping. This setting had immense possibilities, and I was prepared to have my hair raised and my blood curdled, but never for a moment was I really frightened of Spike, and I was frankly bored by the passage where the Superintendent was given just twenty seconds to come clean, or else . . . This is no criticism of the acting of Mr. Yerbury as Spike; he might have walked straight out of an American gangster film, though he was more of an Alan Jenkins than a Humphrey Bogart. The scene lacked the necessary light and shade to lead up to that dramatic climax, and the tempo throughout was too slow, except for the curtain, which was one of the best examples of slick and exciting corpse manipulation I have seen. The kidnapping scene was another in which the full dramatic effect was missed. To my mind this tense climax was entirely destroyed by the subsequent remark, " He must have mistaken him for Lord Nuffield." But then I like climaxes, and I believe very strongly in the importance of effective curtains.

The production was smooth and efficient, and never obtrusive. Ambitious feats were attempted and achieved. The flooding of the dungeon, the staging of the trial scene, the wheeling in of the operating table on which lay the anæsthetised body of the Superintendent, the rapid scene changes, and their almost pantomimic number and variety are sufficient proof of the standard attained. Mr. Brown as a producer is happier on the top of a ladder in the flies than sitting in a dress tie behind the piano, and the energy and hard work which he applied to the problems with which he was confronted were justified by the results he obtained. He was ably assisted in this by his stage manager, Mr. John Musgrove.

Mr. Forbes was more concerned with characterisation and choreography, at both of which he excels. Once or twice I found him a trifle too modest. As a number I liked the Borough Fling. I liked the idea of the spread of its infectious step and rhythm till it was being sung and danced by the whole cast, and in these days of Palais Glides and Chestnut Trees I should have liked to have been allowed to join in the chorus myself. What a wonderful opportunity is provided by a Residents' Play audience for this type of community singing!

The dialogue was simple, effective, witty and always to the point. The rhyming couplets in the Trial Scene introduced just the right sort of comic-opera atmosphere, and must have been great fun to write.

The music seemed to me quite excellent, although I cannot claim to be a critic. I enjoyed very much the Handelian part song in the Trial Scene, with its magnificent quartet of bass-baritone voices. Another quartet which could have secured many more encores than it was allowed to have was the Staff Song in the kidnapping scene. This song was especially notable for its lyric, of which every syllable could be clearly heard, and consequently appreciated. Mr. Mann's lyrics read delightfully throughout, and were refreshingly witty and sophisticated. On the

whole, however, they were tongue-twisters, and it seemed to me that he was expecting too much of his unfortunate singers to put across such rhymes as " Mollison : jolly fun," and " Dhobie's itch : George Robey's rich." The quartet of nurses in this song (" What wonderful men they are ") seemed to have their breath literally taken away at the very thought of embarking upon it. One

Nurses Pregnyl, Valyl and Doryl Gossip

of the most successful numbers was " A little white bow." A good tune with just the right sentiment for the traditional love duet, it was admirably put over by Mr. Salmon, the hero, and Mr. Young, the heroine. These two were first class throughout. Mr. Salmon was obviously not taking the stage for the first time, and he deserves much credit for the efficient way in which he handled the unenviable part of the hero. Mr. Young was something new in heroines—now a coquette with Eddie Cantor eyes, now holding in check the advances of Bonydear with impressive dignity, now in tears in her hero's arms, he succeeded in bestowing on each of these emotions just that almost imperceptible *soupçon* of burlesque which lifted his performance out of the rank and file of Residents' Play heroines.

But without any doubt the most brilliant success of the evening was Mr. Epps as Mr. Grock. The original of this impersonation is said to have regarded himself as so lacking in characteristics as to be beyond fear of impersonation; he must now realise how wrong he was. Mr. Epps's performance attained perfection by its restraint and the faithfulness of its portrayal. The dialogue with the ward clerks in the theatre scene was a classic not easily to be forgotten. As though not content with achieving such a triumph, he must needs double the part of P.C. Nod to demonstrate conclusively that he is a master of comedy.

Mr. Willis was the best Bonydear we have seen, and must obviously have studied the original with analytical care. The authors were blessed with such a galaxy of talent that one is tempted to use so many superlatives as to arouse suspicion as to the sincerity of one's description. Mr. Stoneham's delightful little, though substantial, cameo of one of Miss Italia Bronte's young ladies obtained the roar of applause which it deserved. Mr. Hutton's assured handling of the College waitress sketch must have consoled him for the less enviable task of portraying Ratkins, a part for which he was physically unsuited. Mr. Smart's caricature of the judge appeared to give him as much enjoyment as it gave us. Mr. Gardiner is beginning to develop something of a

Bill Smith and Spike Johnson

reputation for his Cockney characterisations, and neither as Bill, nor as the amorous porter did he put a foot wrong—not even in his step-dancing.

The scenery, conceived by Mr. Mann and rendered by Farmer, was so effective that it would seem quite unnecessary to invoke professional aid as in past years.

Finally, the playing on two pianos of Mr. T. H. Hills' music by Mr. Forgacs and Mr. Stares makes this year's gramophone record, which can be obtained from the Guy's Shop or the Counting House, well worth 2*s*. 6*d*.

LYRICS

JUST A LITTLE WHITE BOW

Luke—
Sometimes in the College, don't you wish you could
Leave the smoky Borough for a bluebell wood ?
You would find it peaceful, she would like to go
Where the hills are climbing and the breezes blow.

Luke and Ann—
Just a little white bow,
It looks so charming ;
Just a little white bow,
It's so disarming ;
Just a winning smile
When she goes dancing,
Just a little guile
You'll find entrancing ;
Blue may match your eyes, my dear,
But the thing which wins at Guy's, my dear ;
Is a little white bow beneath your chin.

Ann—
Just a little dreaming, we would have you know,
Just a little scheming where the violets grow ;
We would be romantic if we only could,
But, unless the Matron hears, we must be good !
Just a little white bow, etc.

Both—
Sitting by the fireside, when the night round's due,
Just about eleven, ward report is through,
Making tea and coffee, looking very coy,
Every pretty head nurse is an H.P.'s joy !
Just a little white bow, etc.

Both—
Many things are pretty, many people plain,
We have never thought before life is but a game,
But we want to play it, even if we're strings ;
Don't you think that, anyway, bows are pretty things ?
Just a little white bow, etc.

NO DOUBT ABOUT IT

Daisy's Dolly—
Oh, I find that this fashion
Of life without passion
Is not like our living pre-war ;
And when Tetrazzini
Sang airs by Puccini,
No Resident went home till four ;
When they wore white gardenias,
Knew more than their seniors
And hung round the Empire stage door ;
Now they've milk-bars and motors,
No longer wear boaters—
There's really no fun any more !

Redley—
There's no doubt about it,
I've no need to shout it
That's Surgery's really an Art.
D.-D. here believes it,
While Grock here agrees it
's a gift that the Muses impart ;
And it's only physicians
Who keep the morticians
From starving and going up higher ;
M. and B. 693, sir,
Won't cure a knock-knee, sir—
A surgeon's the man you require !

Bonydear—
When I cruise on the ocean
I find that the motion
Of sailing to Rio is grand ;
We go singing and dancing
Through tropics entrancing
And don't care a hoot where we land.
There's no doubt that in Cuba
I'm not an intruder,
My presence I need not excuse ;
As Bony they know me
From Boston to Tomi—
And at Guy's when I'm home from my cruise !

Grock—
When out in the States, boys,
I used to jump freights, boys,
And find things most terribly cute ;
And I used in Chicago
To sing Handel's *Largo*
To Edward G. Robinson's flute.
I returned to teach students
The ways to use prudence,
I made Lady Houston a text ;
There's no doubt that I'm smart, sir,
With lungs or a heart, sir—
My spiritual home in the chest !

LET'S LEAVE THE COLLEGE

Daisy—
Here's my advice
And take it if you will ;
If you are nice
Then it's no place for you ;
You hear such things
A girl should never do—
At any price
Then, it's no place for you !

Dick—
Oh, it's fetch a crate of beer for twenty-three ;
Daisy—
A glass of milk ; a pot of tea ;
Both—
Life has lost its thrill for you and me—
So let's leave the College !
Daisy—
Oh, it's haggis for the Super. ; the Dean likes leeks ;
Dick—
I haven't been to sleep for weeks and weeks,
Both—
Better run a coffee-stall in the streets,
So let's leave the College !
Let's be wed and take a pub and won't it boom,
We'll hang outside a sign that's from the externs' room!

Dick— Oh, it's where's the take-in H.S.,
Daisy— Where, oh where ?
Dick— He's not in here,
Daisy— He's not in there ;
Dick— Shouting for a waitress ;
Daisy— But I don't care,
Both— So let's leave the College !

Dick—
I used to think
That life had yet a thrill ;
I'd rather be
Where telephones are still ;
I'd like to go
Where H.P.'s never tread,
So Dais' and I
Will take a pub instead.

Oh, it's fetch a crate, etc.

THE BORO' FLING

Bonydear— The valse they say is charming in Vienna,
The tango's very popular in France,
They like the minuetto in Sienna ;
At Guy's we've got the very latest dance.

All— Just start to sing
And dance the Boro' Fling,
And take a little exercise new ;
Don't be afraid
When in the Colonnade
You'll soon forget that life was blue ;
Just give a laugh
And watch the stately staff
Descending from their motors and say :
To-day instead
Of standing round a bed
We'll do the Boro' Fling this way :
It goes like this, it goes like that ;
If you want to know the proper way to do it,
It goes like that, it goes like this ;
Another little turn and you are through it
Then let's all sing
And dance the Boro' Fling,
We'll start a fashion here that's new ;
Don't be afraid,
Just ask a pretty maid
To dance the Boro' Fling with you !

Bonydear—
In Cuba you will dance the rumba nightly,
The Highland reel, I'm told, is " it " in Skye,
Big Apples down in Harlem are unsightly,
So dance the Boro' Fling round Thomas Guy.
Just start to sing . . .

Bonydear—
There's dash about a czardas out in Buda,
I'd love to dance the polka in Cracow,
Hawaian girls may do the hula-hula,
The Boro' Fling's the latest thing just now.
Just start to sing . . .

Bonydear—
Mazurkas may be good enough for Gorki,
In Bali you might learn a thing or two ;
No need to see Fred Astaire at a talkie,
Just look ; we'll teach the Boro' Fling to you.
Just start to sing . . .

Bonydear—
Some find that Palais Glides are stimulating,
The Lambeth Walk is popular I know,
But when through Guy's you go perambulating,
The Boro' Fling's the only way to go.
Just start to sing . . .

Hospital Information, etc.

Pass List

ROYAL COLLEGE OF SURGEONS.
FIRST PROFESSIONAL EXAMINATION.
L.D.S.
January-February, 1939.

Dental Mechanics and Dental Metallurgy.

S. B. Bennett
J. F. R. Bentley
J. K. Blackwell
A. H. Drewitt
J. R. Dyer
K. E. Gateley
K. R. Glanville
A. W. Gunn
A. Halamandres
J. M. Hanson
F. E. B. Heesom
W. H. Hudson
N. A. Power
J. C. Timmis
H. R. Unstead
S. P. Vorster
E. D. Whiteley
J. B. Woodward
D. Wright

Anatomy and Physiology.

M. Barber
J. A. Boyd
P. Cohen
W. O. R. Evans
K. E. Gateley
D. Gill
W. H. Hudson
R. B. Illing
J. A. W. Purnell
W. L. Renouf

Special Anatomy and Physiology.

J. R. Dyer
P. Fletcher
J. W. S. Harvey
D. Mackenzie
H. H. S. Payne
K. R. D. Porter
N. A. Power
J. C. Timmis
J. B. Woodward

UNIVERSITY OF CAMBRIDGE.
EXAMINATION FOR THE DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY.
PART I.
February, 1939.

*A. C. R. Wakeman A. B. Wayte
* Awarded distinction.

Appointments

P. M. Moffatt, M.D., M.R.C.P., F.R.C.S., D.O.M.S., Assistant Surgeon to the Western Ophthalmic Hospital.

Births

CUMMINGS.—On February 11th, 1939, at Osborne House Nursing Home, Gloucester, to Esmé, wife of Leslie H. G. Cummings, L.D.S., R.C.S. (Eng.), Ivy House, Barton Street, Gloucester—a daughter.

Marriages

MINIFIE—LANE.—On February 11th, 1939, at St. George's Church, Deal, P/O. John G. Minifie, R.A.F., to Joan Lane (C.S.M.M.G.), late of East Sheen, S.W.14.

Changes of Address

H. J. B. Atkins, 27, Chester Terrace, Regent's Park, N.W.1.

EDS. { C.H.E. W.E.Y.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *11th March* 1939 — *Number* 1321

PASSIM

EVERYONE connected with Guy's will welcome the opening of the enlarged and renovated Children's Ward, for which the initiative and perseverance of Dr. Cameron are so largely responsible. The Ward, which now covers the whole floor above Wilks and Bright Wards, consists of a surgical and medical part. These are to be called, respectively, Caleb and Diplock, in commemoration of the donor who provided the money for their construction.

Both Wards consist of divisions of different sizes, designed for from one to six cots, and separated from each other by glass partitions; and each division has its own wash basin.

The total number of cots is sixteen in Caleb and thirty-one in Diplock; some of these are, in fact, small beds for the older children. The surgical cases will be in charge of the House-Surgeons of the Surgeon under whom they were admitted; the medical cases will be looked after by the House-Physician to the Children's Department, who will have one of the Assistant House-Physicians to assist him. It is worth recording here that the telephone number of Caleb is 324, and that of Diplock is 273.

General features of the two wards are the rubber floor, which obviates a good deal of the unnecessary noise so familiar in most of the other wards of the Hospital; the ceiling, which has been lowered eighteen inches to make room for hot water pipes which will keep the wards at a constant temperature; and the white tiling of the walls, which, relieved by pictures illustrating nursery rhymes, gives an impression of brightness and cleanliness to the whole.

There is a special isolation room whose glass walls, separating it from the rest of the ward, rise to the ceiling; and there is a room for a nursing mother which, with special bathroom attached, will help to remove one of the most serious problems of organisation that confront House-Physician and Sister: that of nursing a sick and often premature baby, when it is still at the breast and when its life may depend on its remaining so.

Various modern devices have been introduced, which will be specially welcome to the nursing staff. Thus in each of the four sluices is a machine which washes bed-pans with jets of hot or cold water, or of steam; and in the kitchen there is an automatic dishwasher and a machine which washes and sterilises babies' bottles.

The balcony outside the wall facing Nuffield House deserves special mention, both for itself and because the wards immediately below benefit by having secondary balconies below it. It is a pity that Victoria, on the first floor cannot be given one too. Here, for when weather permits, is a large airy space for the children to lie or play in, protected by glass and wire-netting from the possibility of falling over. At one end is a play room, with glass walls on three sides, but heated to the same temperature as the rest of the ward.

Thus Guy's is provided with a first-class children's department, in which almost all the children admitted into the hospital can be treated, to the advantage of sick adults kept awake by the squalling of infants in the general wards. With its present staff we may be confident that it will provide material for a first-class teaching unit, from which every student entering the hospital will benefit.

From time to time, a demonstration of cases will be held in the space between the two wards. These will take place on Thursdays at 4.30, not weekly as does the august Tuesday assembly on the floor immediately below, but as often as a sufficient number of cases of interest has been collected. A notice will be posted in the Colonnade whenever one is to take place.

▭

IT must not be thought that the inevitable fly has not dropped into the ointment. It is of

course practically a vital part of our design for living that there should be some device, however small, to make us realise the remoteness of perfection, to make us grateful for what we *have* got, to prevent our energies or our ingenuity from lying entirely fallow. The latest problem to be devised is, briefly, how to put the beds from Wilks or Bright on to their new and spacious balconies without trauma to the doors, the beds, the bed clothes, the patient, or to those engaged in attempting to solve the problem. Measurement with a tape measure, notoriously inaccurate as many a ward clerk knows, has shown that an average bed is two inches too wide for the doors in question. Experimentally it has been proved that the bed, without patient and without an excess of clothes, can with a considerable amount of effort be made to pass to and fro through the door. Paint was lost from the door, scratches were made on the bed, the counterpane was all but stripped. Whether or not a bed, fully loaded with a patient, blankets, rugs, etc., will be able to make the passage we do not yet know. We are not offering any prize for the correct solution.

IT is with regret that we notice the death, on Monday, March 16th, of Mr. C. H. Golding-Bird, Senior Consulting Surgeon to Guy's, at the advanced age of 90. Though his death severs, perhaps the last link connecting the Golding-Bird family with Guy's Hospital, the connection is maintained by the Golding-Bird medals and prizes, from which generations of students have profited. A full appreciation of Mr. Golding-Bird will appear in the next *Gazette*.

WE wish to draw attention to an error of dosage which appeared in Dr. Douthwaite's Clinical Lecture entitled "Modern Therapeutics." This lecture was published on February 11th.

The dose for Heparin is given as .001 to .002 milligram. It should read .001 to .002 gram; the unit dosage is correct.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.
(*continued*)

Tuesday, November 9th—Boston.

Drove with my luggage to Phillips House (private wing), where Allen was doing some small operation. Later across to theatre block.

One man was doing a varicose veins operation he was very pleased with, though it seemed pretty drastic. With varicose ulcers he first ties the internal saphenous, then excises and grafts ulcer, then does this job to tie all the deep communicating veins. Long incision from behind knee to halfway between internal malleolus and tendo achillis. Sews towels to skin with continuous silk (by the way, this is technique whenever X-rays may be wanted during an operation—not the reason here), carries incision through deep fascia, and, working under this backwards and forwards the whole length of the leg, divides all communicating veins between forceps and ligatures each end with silk.

Allen was meanwhile operating for carcinoma of the stomach. He says they are using the peritoneoscope quite a lot, especially to decide on operability. Right paramedian. Shifts over to left side to do most of operation. Points out fold of peritoneum with middle colic vessels in it adherent to posterior surface of stomach, and how frequent this is. Cuts across vessels of omentum between epiploic arch and colon (they are not nearly so many or so large as I thought). Cuts across stomach with cautery between Peyer's clamp, first making hole in meso-colon from above. Fixes meso-colon to posterior surface of stomach, not sewing it, but picking up edge of hole with hæmostats one inch apart, and tying them in stitches taken through stomach wall. Two layer catgut anatomosis, using Connell for return through and through layer. Says they have found cancer may extend 1 cm. down duodenum. Closes duodenum by continuous Halsted over clamp. Abdominal wall with through and through silver wire.

Allen next did a cæcostomy preliminary to resection of colon. He did not explore, said he would resect whether there were metastases or not—it is the best palliative operation. Sewed in large hard rubber with double purse string, then glass elbow, then other rubber. This is more elaborate than our emergency cæcostomy, and we should not do the operation here, as transverse colostomy would be safer.

Churchill.—Exploring neck of a man complaining of hoarseness, with paralysis of right vocal cord. A small lump at back of larynx has been removed and reported inflammatory. Now has mediastinal shadow, and tender lump just above clavicle. Turns up collar flap. Separates muscles, sews across in two places with silk on right side and cuts between them (instrument nurse has seventy curved needles ready threaded with silk).

Uses silk stitch through lateral lobe of thyroid to pull it across; finds irregular induration between carotid, thyroid and œsophagus in which inferior artery cannot be cleaned. Looked malignant to me. Biopsy.

I went to tea with Fred's friend, Merriman, head of one of the large Harvard houses and more Baliol than Jowett.

Allen asked several people to meet me at dinner. Professor Eliott Cutler and his wife, Churchill and his wife, and Brewster and his wife—a cheery party. Eliott Cutler told an excellent story about the Pope going to heaven with a skill that I did not imagine that a man of his rather serious type could muster. Churchill is a young man (say 35 to 37) for a professor at the oldest university, and is tremendously looked up to even by people like Cope who are near him in ability and age. His chief line is thoracic and heart surgery. I found him a careful operator and a discerning talker; I must read up his writings. I went on a round with him yesterday, with "4th year" (as far as I could make out about senior dresser standard, but with no practical work as yet) students, on thoracic cases, as a follow-up to surgical lectures on diseases of the pleura and œsophagus and medical lectures on pneumonia and so on. The talk may have been influenced by my presence, but I was rather alarmed by the discussions on thoracic operative surgery, indications and results, and on X-ray diagnosis, teaching that would have been tough meat for post-graduates. There happened to be some weird rarities, a girl of twelve who had had an empyema since the age of three, and now had a pleuro-œsophageal fistula, a woman with a leio-myo-sarcoma of the œsophagus, a man with a caustic stricture of the œsophagus and a partial spontaneous pneumothorax, another with the ilium removed above the acetabulum for sarcoma, who walked well and went to sea as a skipper of a fishing boat. However, I feel, on the admittedly small amount of teaching I have seen and heard, that there is very little simple clinical instruction and discussion of histories and physical signs, little encouragement to the student to make a tentative diagnosis before it is made for him by his seniors.

Churchill and his wife have just bought an estate in Vermont, 160 acres of hill, woods and disused agricultural land, and four hours' drive from Boston.

Wednesday, November 10th

With Allen to a round at Beth Israel Hospital, a new Jewish place. His friend Charles Mixter is a chief surgeon, and gets Allen down occasionally for grand rounds to give the residents a change of teaching.

Feins (or Fins), or rather one of the residents, showed a case recovering from operation for duodenal hæmorrhage. The cases were presented by the residents, all Jews, and admirably done. The boys spoke well, had all their facts in order, never hesitated and used no notes; an excellent training. Fins had operated in a recovery stage after several severe hæmorrhages; he split the duodenum in some way to get at the bleeding point. Quoted some man, Moutier (or "au") who had 600 bleeding duodenal ulcers and only one died of hæmorrhage. Allen lays great stress on over or under fifty. In the 50-70 group he found a third of bleeders die of hæmorrhage; in the under fifty it is much less. He blames sclerotic changes in the artery; age therefore an indication for operating. Three sources of bleeding—pyloric, gastro-duodenal, inferior pancreaticoduodenal—all may have to be controlled. The discussion revealed ideas of gastric technique at this hospital that are different from ours. Their resections are very conservative, and there is a fondness for weird operations.

Another resident showed, and Mixter, who had operated, discussed, a case of Krohn's disease. This was a bad one, long history, pus in urine, two ileo-sigmoid fistulæ. Two-stage resection, first stage ileo-transverse anastomosis. A large piece, at least two feet, of ileum was resected with the cæcum (specimen shown). The ileum was stuck on the bladder, but there was no perforation. Pelvic colon brought out as Miculiez. Specimen showed several separated areas of disease.

Mixter had a good many cases—20 operations, of whom 17 were Jews, 3 Gentiles.

In three, appendicectomy only was done.
In eight, one-stage resection; one death.
In nine, multiple-stage resections; three deaths.
Mortality, 20 per cent.

In the survivors there has been no recurrence. He says that they are very difficult cases, to know whether to operate, when to operate, and what to do. Characteristic features—loss of weight with attacks of partial obstruction. Does not think any get better without operation; they might, but they all seem to progress, certainly with intervals of quiescence. Deep X-rays have been suggested; he is afraid, judging by its effect elsewhere, that it might lead to breaking down and sinus formation. Lateral anastomosis gets over immediate trouble, and is usually first stage. He does not think it cures; some seem to get better, others progress, and he has no means of estimating which. It is mesenteric involvement he fears, and he might take a chance of watching a case with lateral

anastomosis if it was a mild one, and at operation the mesentery was only slightly involved.

Allen said he had had four recurrences; he thinks insufficient resection of mesentery is the chief danger.

Next case was carcinoma of rectum in a woman. They had done Rankin's operation; this is the one I had come to look on my own—first colostomy, exploration, turning in proximal end of distal loop and dropping it back into the abdomen; second stage, perineoabdominal.

Another case was a man of seventy. They had done a loop colostomy followed by a Lockhart Mummery excision. Allen, in discussing the case, emphasised the value of a preliminary colostomy. He says that even in an inoperable case resection is much the best palliative operation available. He finds radium no good. Mixter says that sometimes, but not often, coagulation of the surface of a fixed inoperable growth gives relief.

The next case shown was a middle-aged man with heart disease, who had been having showers of emboli. Three years ago he had an apparent popliteal embolism, from which his leg, after being cold and anæsthetic, gradually recovered. A short time ago the dorsalis pedis artery could be felt. Now he has had another embolism and his foot has again recovered, but a patch of gangrene has appeared in the foot and heel. Query what to do. Allen says obviously amputate; he might try to save the knee, but thinks it too big a risk, and in a man who is going on getting emboli pretty useless. He says that the glass boot, while it has proved valueless in thrombo-angiitis obliterans, is most valuable in saving limbs after embolism. This is because the arteries, except for the blocked one, are normal. In their experience of peripheral embolism at Boston, surgery saves one-third, but the boot two-thirds. Several people have said this about the boot in thrombo-angiitis being no good; intermittent venous obstruction is, however, of some value.

(*To be continued.*)

A Case of Febrile Purpura

By Dr. J. F. Buckmaster

THIS case presents some interesting features which have led some observers to speculate over the precise diagnosis. The history was difficult to obtain in accurate detail and this left room for doubt.

History.—V. H., a corn merchant's labourer of 26 years, presented himself one morning with a temperature of 104.5°. He gave a history of leaving work seven weeks previously with malaise and slight yellowness of the skin. His doctor told him he had jaundice and must rest at home. Questioning of the relatives failed to reveal a definite history of jaundice of the catarrhal type in so far as they volunteered that his urine had not been dark, but his stools were not noticed. On examination, nothing abnormal could be found except an obvious anæmia and old and recent petechiæ on his legs, forearms and abdomen.

The next day (23rd November, 1938) he was taken into hospital with a provisional diagnosis of septicæmia. He was an ashen-grey colour, temperature 103°, pulse 140, respiration 24. His gums were oozing fresh blood. The following story comes from the notes made at the time. On examination: blood pressure 125/90, systolic apical murmur, pronounced venous pulse in jugular vein. Lungs: a few crepitations at the right base. Abdomen: no abnormality, well covered. Nervous system: alert mentally, answers slowly to questions, complains of "pounding" in the head, pupils and eye movements normal, bilateral extensive retinal hæmorrhage, dark red and irregular, cups normal. Reflexes and muscular power normal.

The specimen of urine was blood-stained and gave a positive guaiac test, red blood cells seen, no pus cells. Blood film showed very few white cells. The slide did not take up the available methylene blue very well, there was a good deal of hæmolysis in the unstained film. Blood culture, subsequently reported sterile after one week, agglutinations for enteric and Brucella groups negative. Bleeding time, over eight minutes. Colorimetric hæmoglobin estimation 30 per cent.

November 24th, 1938.—Hæmaturia again. Complains bitterly of buzzing and pounding in the head. Very irritable. No further physical signs. Temperature 101°, pulse 116, respiration 24.

November 25th, 1938.—Vomited a little blood. Gums still bleeding. Liver therapy started. Combination of hepatex and campalon given:—

Campalon, 11.30 a.m., 1 m. 2 c.c.
Hepatex, 5 p.m., 1 v. 5 c.c.
Hepatex, 11 p.m., 1 v. 5 c.c.

Curled up, photophobia, very irritable. Plantar response ? 8.30 p.m., incontinent of urine. Right hand not moving with the arm. Campalon, 4 a.m., 1 m. 4 c.c.

November 26th, 1938.—Dr. Starling was called in consultation and raised the question of agranulocytosis and took blood for examination. From relatives, no history of any kind could be obtained of drugs having been taken by the patient. They said he would not have taken any because six months ago he took 10 grains of aspirin and had nausea and epigastric pain immediately afterwards. The patient was not sufficiently sensible for information to be obtained. 3 p.m.—Blood count by Dr. Brough :—

Red cells—one million ten thousand.
Platelets—present but diminished.
One megalocyte seen.
Cells well coloured.
White cells—800 per c.mm.
Polymorphs—15 per cent.
Lymphocytes—80 per cent.
Eosinophils—4 per cent.
Monocytes—1 per cent.

Dr. Starling suggested whole blood intramuscularly. This was started with 5 c.c. from one of the patient's brothers. Examination just before this was given revealed paralysis of arm and leg on the right with bilateral ankle clonus and a lessened response to pin-prick on the right side of the body. The specimen of urine an hour before this had been free of blood.

November 27th, 1938.—Gums bleeding again ; blood could be expressed from the sockets of the teeth. 9 c.c. of whole blood given intramuscularly. General condition similar to yesterday. Temperature 104°, pulse 132.

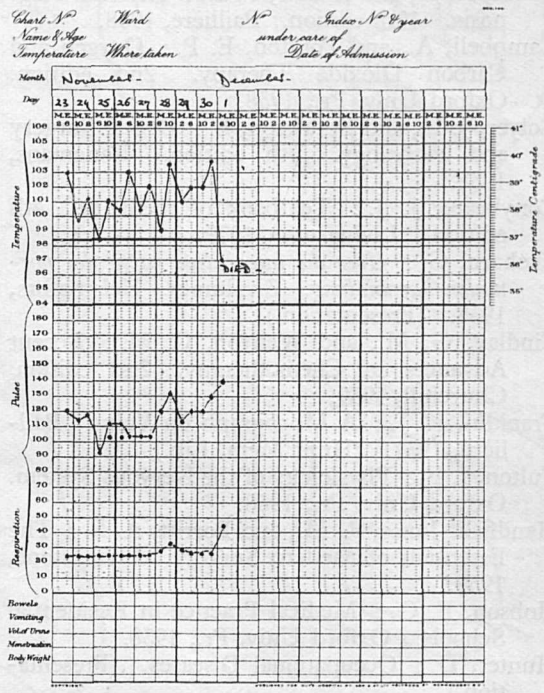
November 28th, 1938.—No visible bleeding. Whole blood 10 c.c. given. White count, 2,000 whites per c.mm.

November 29th, 1938.—Temperature 103.5°, pulse 120. Patient unrousable. Air hunger. Gums still oozing blood.

November 30th, 1938.—Temperature 104°, pulse 136, respiration 32.

Died December 1st unconscious and with extreme air hunger. 2 a.m., temperature 104°, pulse 140, respiration 44. Died 11.30 a.m.

Post-mortem.—The body was not wasted. There was good colouring of the viscera. The bone marrow of the ribs was not abnormal to the eye. The lungs were healthy. The main air passages showed a few petechial hæmorrhages. The heart was normal except for an extensive hæmorrhage under the visceral pericardium. The pericardial fluid was normal. There was no glandular enlargement in the mediastinum or lumbar or mesenteric chains. The abdominal organs were healthy and of good colour. The



spleen was normal in size, consistency and appearance. The kidneys were normal, as were the pancreas, suprarenals and tonsils.

* * *

The absence of any definite history in this case makes the diagnosis uncertain, but the blood picture was, in my opinion, one of aplastic anæmia. One would have expected the organs to be paler than they were, and, had they been so and had the blood shown a few abnormal cells, a diagnosis of aleukæmic leukæmia might have been tenable.

In thirteen cases of agranulocytosis reviewed in the *British Medical Journal* and *Lancet* from 1934 to 1935, one case only had no ulceration of the throat.

The various blood pictures given for these cases are not similar to this one, and in the absence of such a history as was given for these thirteen cases, the first suspicion was not justified.

The writer has formed the opinion that the case was one of febrile purpura probably due to aplastic anæmia of unknown causation !

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Weeks, C. C.: Alcohol and Human Life. 2nd edition. Lewis, 1938. (Presentation.)

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Continued Eruption of the Upper Left Third Molar

A Casual Communication read to the Dental Society on Monday, 14th November, 1938, by J. C. Ritchie, Esq.

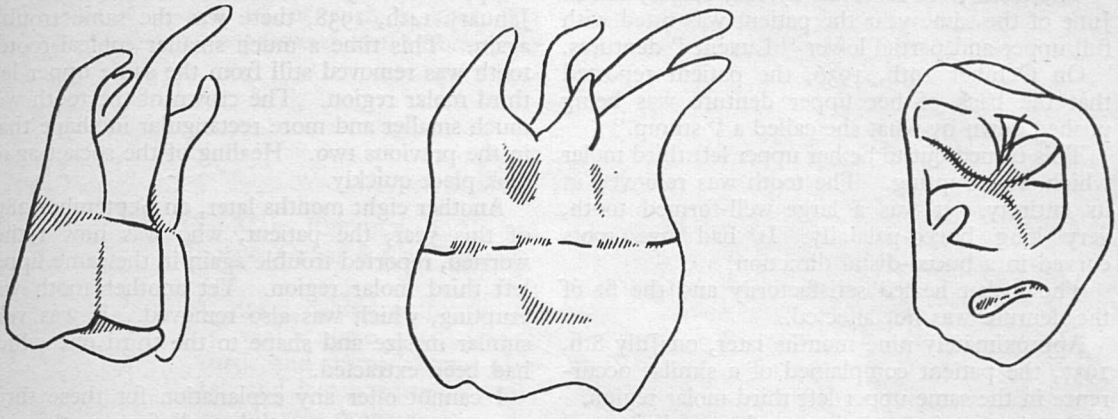
MR. CHAIRMAN and GENTLEMEN,—In the few minutes I have at my disposal I should like to describe to you a case in which there was a continued eruption of teeth in the upper left third molar region.

The patient was a young woman of 22 years. She first sought dental treatment in March, 1936. When her mouth was examined it was found that she had an incomplete set of teeth which were rather uncared for. Caries was rampant. The teeth themselves were poorly calcified and hypoplastic; in fact, they spoiled her appearance.

It was decided to clear the upper jaw and the lower premolars and molars, but leave the lower

1

Buccal Surface. Mesial Surface Occlusal Surface



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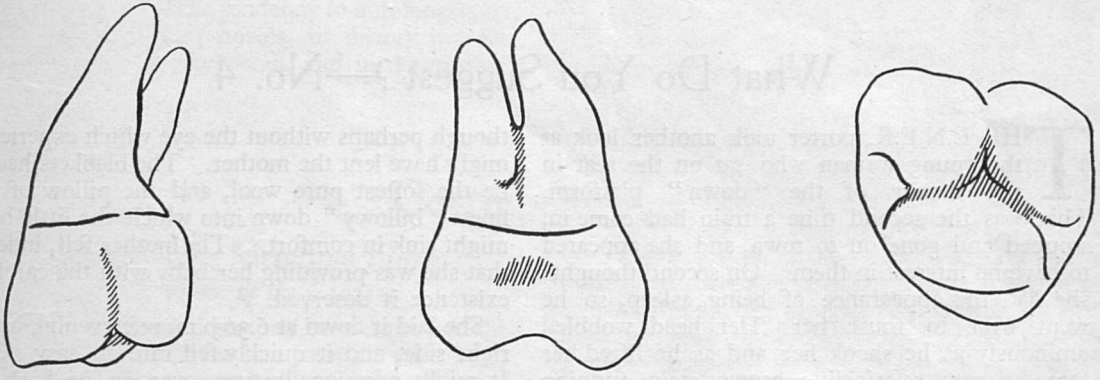

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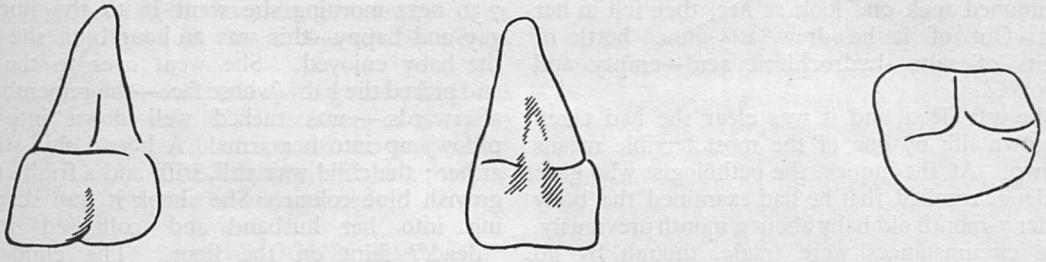

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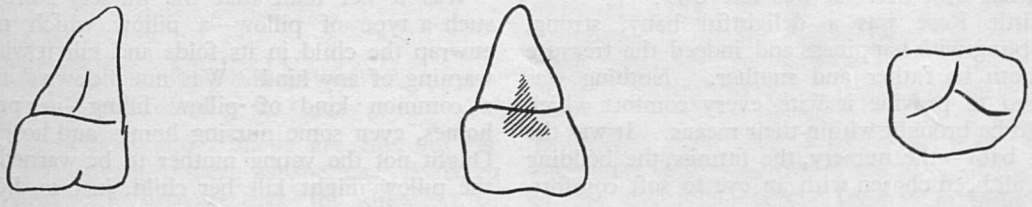


incisors and canines to help her to stabilise a lower denture.

The teeth were removed by easy stages, and in June of the same year the patient was fitted with full upper and partial lower " Luxene " dentures.

On October 19th, 1936, the patient reported that the back of her upper denture was being pushed down by what she called a " stump."

This turned out to be her upper left third molar which was erupting. The tooth was removed in its entirety. It was a large well-formed tooth, very long bucco-palatally. It had five roots curved in a bucco-distal direction.

The socket healed satisfactorily and the fit of the denture was not affected..

Approximately nine months later, on July 8th, 1937, the patient complained of a similar occurrence in the same upper left third molar region.

On examination, another tooth was discovered erupting in the same region as before. This was also removed. It was nearly as large as the first tooth, but had only two roots. Again the socket healed up nicely.

Approximately seven months after this, on January 14th, 1938, there was the same trouble again. This time a much smaller conical-rooted tooth was removed still from the same upper left third molar region. The crown of the tooth was much smaller and more rectangular in shape than in the previous two. Healing of the socket again took place quickly.

Another eight months later, on September 28th of this year, the patient, who was now rather worried, reported trouble again in the same upper left third molar region. Yet another tooth was erupting, which was also removed. It was very similar in size and shape to the third one which had been extracted.

I cannot offer any explanation for these three supernumeraries except that all four teeth must have been present somewhere behind the posterior wall of the antrum at the same time.

What Do You Suggest ?—No. 4

THE L.N.E.R. porter took another look at the young woman who sat on the seat in the corner of the " down " platform. That was the second time a train had come in, stopped and gone on to town, and she appeared to have no interest in them. On second thoughts she had the appearance of being asleep, so he went over to rouse her. Her head wobbled ominously as he shook her, and as he lifted her face he saw a trickling brown stain running down her chin from the lower lip. She was unconscious : a police officer who was hurriedly summoned took one look at her, then felt in her bag. Out of it he drew a 5-ounce bottle of spirits of salts—hydrochloric acid—empty and uncorked.

She was dead, and it was clear she had taken her own life by one of the most terrible means known. At the inquest the pathologist who gave evidence recalled that he had examined the body of her 7-month old baby about a month previously. The circumstances were tragic, though by no means uncommon, and the affair had preyed on her mind to such an extent as to drive her to take her own life. It was like this :

Little Rose was a delightful baby, strong, bubbling with happiness and indeed the treasure of both its father and mother. Nothing was spared to provide it with every comfort which could be brought within their means. It was the first baby—the nursery, the fittings, the bedding had all been chosen with an eye to soft comfort, though perhaps without the eye which experience might have lent the mother. The blankets had to be the softest pure wool, and the pillow of the finest " billowy " down into which the little head might sink in comfort. The mother felt, indeed, that she was providing her baby with the carefree existence it deserved.

She laid it down at 6.30 p.m. one evening on its right side, and it quickly fell into an easy sleep. It might occasionally turn over on its back, or lie on the other side, but was unlikely to require much attention until next morning. At 7.30 next morning she went in to the nursery gay and happy—this was an hour both she and the baby enjoyed. She went over to the cot and picked the baby (whose face—she remembered afterwards — was tucked well down into the pillow) up into her arms. A horrid chill struck at her ; the child was still, stiff, and a frightening greyish blue colour. She shook it, ran screaming into her husband and collapsed in a " dead " faint on the floor. The child was dead, suffocated in the pillow she had provided with such loving care.

Was it her fault that the nursery store sold such a type of pillow—a pillow which might enwrap the child in its folds and kill it without warning of any kind. Was not " down " filling a common kind of pillow filling—in private homes, even some nursing homes and hospitals. Ought not the young mother to be warned that the pillow might kill her child, just as did the

"flock" packed pillow and the wool packed one. The Coroner remarked then, and again when he held the inquest on her that pillows for children should be of such a kind that *absolute safety could be promised to the mother who bought one. It was not the first time he had held an inquest on death under such circumstances—there had already been 7 in that year alone . . . in that one London Coroner's District!* Well, what do you suggest as *absolutely* safe?

Reviews

Purposes of Love. By MARY RENAULT. Published by Messrs. Longmans, Green & Co. Pp. 375. *Price* 8*s.* 6*d.*

THIS is a first novel, whose author is (or more probably was) a nurse. Its scene is laid in the wards and nurses' home of a large general hospital, and it concerns the work, play and love of a second-year probationer.

It is written with great skill. The author has a clear idea of what the form of her story is to be, and does not allow the tendency to autobiography, so inevitable in first novels, to distort it. She has an artist's eye for detail, and in descriptions of scenes in the wards, or of clashes with authority, the truth of personal experience is evident.

The same realism animates her love scenes, of which there are many, and which may give offence. But there is less self-consciousness here than in the rather frequent instances of literary snobbishness, which are distasteful in being out of keeping with her characters, and sometimes inapposite.

But this is the only strained thing in the book. The author has a good story and tells it well, in a style which is easy, clear and often witty. The book and, much more, the author, should have a good prognosis.

Correspondence

Lewin Payne Memorial Fund

To the Editor of the GAZETTE

SIR,—A general desire has been expressed that the memory of the late Joseph Lewin Payne should be perpetuated at Guy's Hospital. Here for so many years he was one of the best teachers that the Dental School has had, here and elsewhere, and at all times, he gave freely of his time and strength to the service of the Dental Profession.

Contributions, limited to half a guinea, from old Guy's men, and any other members of the profession who care to subscribe, for the purpose of founding a Prize in his memory, will be gratefully received by either of the undersigned.

Yours, etc.,
F. N. DOUBLEDAY.
F. BOCQUET BULL.

Guy's Hospital,
S.E.1.

Women Medical Students

To the Editor of the GAZETTE

SIR,—Gossip and rumour are rife, for the little birds have been whispering. A recent Passim intimated that the question of admitting a certain number of women medical students to Guy's was again under review; a member of the Staff had occasion during the last week to refer to deliberations by the School Council upon this same problem and a random vote among over a hundred of his hearers shewed a very considerable majority of students who looked with disfavour on this project.

There must be two ways of looking at the problem, the women's and our own.

It seems that one of the more important reasons advanced for the admission of women to the Hospital is the provision, for those who have completed their earlier subjects at Oxford or Cambridge, of increased opportunities of doing their clinical work in London. If, being unable to enter any one of the three Schools which have in the past admitted women, they find themselves at Guy's, it is not quite impossible that the advantages gained would be outweighed by a manifestation, on the part of those who regarded their presence as unwelcome, of a certain hostility—a hostility which might well be evident without any resort to bad manners or ill-taste. Doubtless, those who would argue that such a suggestion is merely bizarre would cite examples of the amicable relations existing between men

and women in Colleges and Universities where co-education has been practised for many years. There are those who would say that feelings of animosity, if they existed initially, would be forgotten after a short time by reason of familiarity. Perhaps the reply to such criticisms is to be found in the words written by a member of the staff only last October,"—it cannot seem anything but a disgrace that practically the only homes of education of university standard in the world to-day in which men and women are not allowed to work side by side are some half a dozen medical schools of the University of London."

By no means all men wish to work side by side with women and many of them must have selected one of these last half-dozen citadels of reaction as a place to prepare for their futures in the company of their choice. So, when the invasion by women is complete, gone will be the old places for segretion of the malcontents and there will be not one remaining centre of University education without its hostile male nucleus. Neither is it easy to understand what great benefits the Guy's woman would derive, for by her very presence, many of those characteristics which make medical education here so valuable and distinctive, would of necessity be sacrificed.

If it is true that woman has a place in Medicine and that the need for an increase of her opportunities for her education is urgent, then let those Schools which have a tradition of co-education, or which admit only women students, increase their accommodation and facilities. If necessary found new Schools, but why, indeed, jeopardise the success of a system of education which for two hundred years has owed directly to a woman not one jot or one tittle?

The student's position is difficult. He recognises the authority and weight with which those of many years of educational and professional experience are able to speak. But he, after all, is most directly affected by changes in his student environment. When he regards with nothing less than repugnance the possibility of having to work for several years in the company of women, when he must give up much of the freedom which in the presence of his fellows he can exercise and enjoy at will; when he has visited places of co-education and can no longer give thanks for not himself being at one; when already over-crowded firms are to be augmented by those who will use every one of their feminine and graces to gain their own ends and a look at the patient; when if "take-in" still exists the wretched man must cook supper for the woman house-surgeon and female registrar, by whom he is taught, and account for his expenditure to the lady dressers; then indeed, sir, the student's views are worthy of more than scant consideration.

It is, of course, a fact that at this Hospital there is a small proportion of students who would welcome co-education for themselves, and who being unable to speak of its advantages with more than a grain of experience, aver that no education is complete if isolated from what they elect to call the woman's "point of view," whatever that may mean, or if it means anything, whatever its value. It does certainly seem that a woman has an entirely different perspective, and one wonders whether if using gifts, to us unknown, she might teach us much in Medicine, say diagnosis by intuition, yet it is these very contrasts between man and woman which have earned for co-education the condemnation of Dr. Beddard, expressed in a letter to the *Gazette* in May, 1937.

Well we might ask, how many old Guy's men would record a belief that they would have been better doctors, better men had they had the benefits of co-education?

This letter is written in no spirit of anti-feminism but never was there a cause where apathy could have less place than in the prevention of one single women student ever coming to Guy's; for one leads to two, and two to three and long before the College is pulled down we shall be overrun—man's capitulation will be complete.

Yours, etc.,

R. T. HINDE,

Manchester Reunion Dinner

To the Editor of the GAZETTE

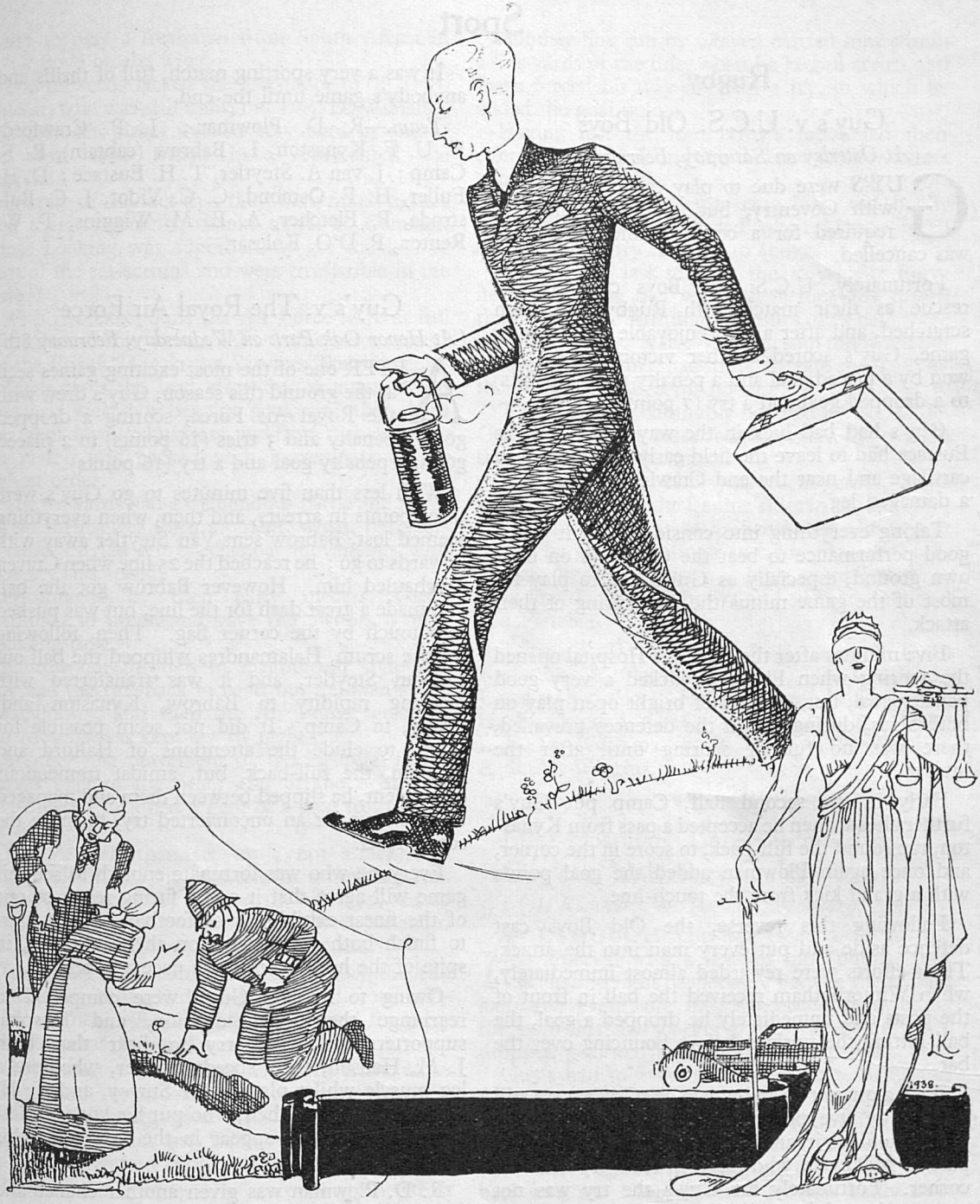
SIR,—A Reunion Dinner of Guy's men living in the Manchester district is being arranged to take place at the Clarendon Club, Manchester, on March 25th, 1939. Any Guy's men with whom I have not communicated would be welcome. Further particulars may be obtained from me at address below.

Yours, etc.,

SYDNEY SMITH.

20, St. John Street,
Manchester.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.



"WHAT DO YOU SUGGEST?"

Sport

Rugby

Guy's v. U.C.S. Old Boys

(At Osterley on Saturday, February 4th)

GUY'S were due to play the return fixture with Coventry, but as the ground was required for a county game the fixture was cancelled.

Fortunately, U.C.S. Old Boys came to the rescue as their match with Rugby had been scratched, and after a very enjoyable and exciting game, Guy's scored another victory when they won by a placed goal and a penalty goal (8 points) to a dropped goal and a try (7 points).

Guy's had bad luck in the way of injuries, as Eustace had to leave the field early on with a torn cartilage and near the end Crawford retired with a damaged leg.

Taking everything into consideration, it was a good performance to beat the Old Boys on their own ground, especially as Guy's had to play for most of the game minus the mainspring of their attack.

Five minutes after the start, the Hospital opened the scoring when Plowman kicked a very good penalty goal, but, in spite of bright open play on both sides, during which the defences prevailed, there was no further scoring until after the interval.

Early in the second half, Camp put Guy's further ahead when he accepted a pass from Kynaston, ran round the full-back, to score in the corner, and once again Plowman added the goal points with a grand kick from the touch-line.

Following this reverse, the Old Boys cast defence aside and put every man into the attack. Their efforts were rewarded almost immediately, when Winterbotham received the ball in front of the posts and immediately he dropped a goal, the ball hitting the upright before bouncing over the bar.

With a quarter of an hour to go, Guy's were still leading by five points, when Cox cut through, passed to Sinclair, and the last player gave a perfect pass to MacLean, who raced in for a try near the corner. Fortunately for Guy's the try was not converted, and immediately the Hospital set up a hot attack which should have resulted in another try, but the Old Boys' defended splendidly and kept the Hospital at bay for the remainder of the game.

It was a very sporting match, full of thrills and anybody's game until the end.

Team.—R. D. Plowman; J. P. Crawford, R. U. F. Kynaston, L. Babrow (captain), R. F. Camp; J. van A. Steytler, T. H. Eustace; D. H. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, P. Fletcher, A. E. M. Wiggins, T. W. Renton, P. D'O. Kolesar.

Guy's v. The Royal Air Force

(At Honor Oak Park on Wednesday, February 8th)

AFTER one of the most exciting games seen at the ground this season, Guy's drew with the Royal Air Force, scoring a dropped goal, a penalty and 3 tries (16 points) to 2 placed goals, a penalty goal and a try (16 points).

With less than five minutes to go Guy's were three points in arrears, and then, when everything seemed lost, Babrow sent Van Steytler away with 60 yards to go; he reached the 25 line when Craven overhauled him. However Babrow got the ball and made a great dash for the line, but was pushed into touch by the corner flag. Then, following a loose scrum, Halamandres whipped the ball out to Van Steytler, and it was transferred with amazing rapidity to Babrow, Kynaston and, finally, to Camp. It did not seem possible for Camp to elude the attentions of Halford and Penman, the full-back, but, amidst tremendous excitement, he slipped between them and managed to dive over for an unconverted try, to make the scores level.

Everyone who was fortunate enough to see this game will agree that it was a fitting result to one of the finest exhibitions of football. From start to finish both teams were on their toes and, in spite of the heavy going, the pace was terrific.

Owing to injuries Guy's were compelled to rearrange their back division, and Hospital supporters will be sorry to hear that both J. M. Hanson, their speedy winger, who tore a leg muscle whilst playing for Surrey, and T. H. Eustace, the scrum half, who put his knee out last week, are likely to appear in the side again this season.

R. D. Plowman was given another chance and performed exceedingly well; his kicking was excellent and, with a little more confidence, he should develop into a really good full-back.

R. U. F. Kynaston was moved up to the centre to partner Babrow, and the latter took the oppor-

tunity to play a freshman from South Africa in D. C. Boyd on the wing.

The forwards lacked the assistance of P. D'O. Kolesar, who was still unfit, but J. R. D. Williams, who took his place, worked very hard in one of the best packs which have represented the Hospital.

In spite of the fact that they were much lighter than their opponents, thanks to H. F. Osmond, whose hooking was superb, they got the ball in most of the set-scrums and were irresistible in the loose.

With two exceptions the Air Force were at full strength, and this was their last game before meeting the Royal Navy in the Services Tournament.

Guy's took the lead after five minutes, when Plowman kicked a penalty goal, and then both teams got down to business, and from then onwards the match was packed with movements of the highest order.

The forwards had a tremendous battle and never spared themselves for a moment, whilst both sets of backs carried out spectacular movements with accuracy and speed.

Encouraged by their early success, Guy's continued to press, and gave the visitors a most harassing time.

Babrow cut through in magnificent style and only had the full-back to beat, but Penman saved miraculously, and then the Air Force retaliated and Moseby was kept out by inches.

Another fine movement by the Hospital threes carried play to the other end of the field, and Van Steytler dropped a gem of a goal from thirty yards' range.

The Airmen then set up a hot attack, and Craven electrified the crowd with a thrilling run, and when faced by Plowman he cross-kicked perfectly. In trying to clear, Guy's were penalised for offside, and Irens kicked an easy goal.

Immediately afterwards the R.A.F. took the lead when their forwards dribbled the ball from mid-field and Beamish gathered and crossed for a try near the posts, which Irens converted.

Guy's started the second half with tremendous energy, and very soon had the visitors in difficulties. Following good work by Van Steytler, Babrow, Kynaston and Williams, Renton crossed for an unconverted try.

In the next minute, Guy's scored again, when Kynaston kicked the ball forward for Babrow to gather and score in the corner.

Stung by this reverse, the Royal Air Force attacked strongly and, following a great dribble by Gascoigne and Beamish, Rogers crashed his way through the centre, passed to Craven, and the latter touched down near the corner flag.

Another fine run by Craven carried him within a few yards of the line, when he kicked across and Irens forced his way over for a try, to which he added the goal points.

Having lost the lead, Guy's redoubled their efforts, but they found the defence of the visitors almost impregnable.

Attack after attack was launched, and finally their efforts were rewarded when Camp scored the equalising try referred to above.

In the very last minute, the Royal Air Force nearly won the day when their forwards forced their way to the Hospital line, but Guy's held them up just in time. A five-yards' scrum followed, but before the visitors had time to put the ball in, the whistle sounded for no-side.

The game was admirably handled by Mr. C. H. Gadney, and both sides fully deserved the ovation they received at the finish.

Judging by their display in recent games, Guy's will soon be one of the leading sides in the country; their team work was magnificent, and although it would be unfair to single out any player in particular, one must pay a high compliment to Van Steytler and Babrow, and also to Osmond and Fletcher.

Team.—R. D. Plowman; R. F. Camp, R. U. F. Kynaston, L. Babrow (captain), D. C. Boyd; J. van A. Steytler, C. Halamandres; D. H. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, J. R. D. Williams, T. W. Renton, P. Fletcher, A. E. M. Wiggins.

Inter-Hospitals' Cup—Second Round
Guy's v. University College Hospital

(At Richmond on Tuesday, February 14th)

ALTHOUGH Guy's crossed over at the interval with a lead of nine points, they had to fight desperately hard in the second half, and eventually they succeeded in reaching the semi-final by scoring 4 tries (12 points) to a dropped goal and a penalty goal (7 points).

Guy's had to make two last-minute changes as J. P. Crawford was still nursing a damaged leg and H. F. Osmond was laid up with influenza.

Soon after the start Guy's lost the services of A. E. M. Wiggins, who ran into the U.C.H. full-back and was knocked out. He was badly concussed and was unable to resume until five minutes from time.

The Hospital suffered a further set-back when T. W. Renton damaged his ankle so badly that he was practically a passenger for the rest of the game, but he pluckily stayed on the field to assist a depleted pack.

In the second half the U.C.H. forwards so dominated the Hospital pack that they seemed quite likely to carry the day. However, Guy's stuck to their difficult task and succeeded in preventing them crossing the line in spite of the fact that two more of their forwards, Kolesar and Vidot, were injured.

Before Wiggins left, an excellent round of passing between Van Steytler, Kynaston and Babrow, at the end of which Babrow drew the full-back perfectly before giving Hartley the run in, placed Guy's in front early in the match.

Apart from this, U.C.H. had quite as much of the play as Guy's; this was chiefly due to the activities of their pack, among whom P. D. Gange, the Blackheath player, was outstanding.

In the back play Kynaston, Babrow and Van Steytler required a lot of watching, but University College Hospital saw that they did not get very far.

However, another excellent bout of passing caught U.C.H. unprepared, and the ball travelled out so quickly to Camp that the latter had a clear run in, but Plowman, who had previously missed a penalty, just failed to add the goal points.

Another fine run by Babrow enabled Kynaston to cross the line, but the pass was forward and a five-yards' scrum followed.

Babrow was in his best form and he electrified the crowd with another dazzling run which left the opposite centres standing. As he approached the full-back he passed to Fletcher, but Brown came across and brought him down well by the legs from behind.

Guy's, however, were now definitely on top, and another spectacular movement enabled Camp to show a clear pair of heels, and he scored his second try with an opponent tackling him a shade too late.

For some minutes after the interval University College Hospital took command, and almost from the kick-off Gange nearly landed a penalty goal. However, Guy's broke away and nearly scored. They were about to finish off a delightful round of passing in front of the posts when one of the U.C.H. forwards got his hand to a pass from Kynaston and eventually Arblaster cleared with a splendid kick to midfield.

This was followed by a period of sustained pressure by the U.C.H. forwards, and Guy's were penned in their 25 for some minutes.

Although University College Hospital were outshoving the Guy's seven, their backs were unable to make much headway owing to the brilliant tackling of the Guy's inside trio.

However, the efforts of the U.C.H. men were eventually rewarded when Arblaster received a quick pass in front of the posts, and without hesitation he dropped a perfect goal.

This encouragement spurred University College Hospital to greater efforts to pull the match out of the fire, and they again set up a hot attack. However, Guy's obtained temporary relief when Van Steytler punted to the other end of the field and the full-back missed the ball completely.

Fuller, Bulstrode and Fletcher were up and nearly scored, but Gange came to the rescue on his goal-line and dribbled the ball to Guy's territory.

With ten minutes to go this same player raised the hopes of the U.C.H. supporters to fever pitch when he kicked a fine penalty goal and reduced the deficit to two points.

The excitement was intense, and it appeared as though University College Hospital would pull through, but when Wiggins returned still somewhat dazed, Guy's roused themselves to a worthy effort and, after Plowman had missed another penalty goal, Babrow, after trying to break through on his own, managed to send in Hartley for a well-deserved try, which was not converted.

Team.—R. D. Plowman; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. van A. Steytler, C. Halamandres; D. N. Fuller, R. T. Hinde, C. C. Vidot, P. Fletcher, J. C. Bulstrode, P. D'O. Kolesar, T. W. Renton, A. E. M. Wiggins.

Guy's v. London Scottish

(*At Richmond on Saturday, February 18th*)

OWING to injuries and illness, Guy's had to draw heavily on their reserves, but they put up a rousing fight, although beaten in the end by 3 placed goals, a dropped goal and 3 tries (28 points) to a placed goal and a try (8 points)

The Scottish fielded their strongest side this season, with six internationals in the side, including R. Bruce-Lockhart, K. C. Fyfe, and G. B. Horsburgh, who have been chosen to play for Scotland against Ireland next Saturday.

J. van. Steytler is the latest casualty, so Babrow moved to stand-off, where his all-round play was a delight to watch and a constant inspiration to his side.

Taking everything into consideration, Guy's acquitted themselves in a way that compelled everyone's admiration. They made the powerful

Scottish team go all the way, and the forwards came out of a grand battle very creditably.

Among an energetic, fast-following pack, who also showed ability to get the ball in the scrum, Bulstrode, Lane-Roberts and Rochford were always to be seen. R. M. Sharpe came into the side as hooker in place of Osmond, who was still down with influenza, and did extremely well.

The Scottish rear division, with Bruce-Lockhart the mainspring of nearly all their attacking work and much of their passing was spectacularly done, with Fyfe on the left wing and Dunn playing a conspicuous part in their scoring efforts.

The first twenty minutes was crowded with excitement, and the passing movements on both sides were a delight to watch.

The Scottish took the lead early on when Fyfe scored in the corner, and a little later he converted a try by Dunn.

Gradually Guy's fought back and, following clever play by Babrow, Camp scored an unconverted try.

The Hospital succeeded in making the scores level, when Babrow broke through again and, after a delightful burst between Lucas and Dunn, he scored a great try, which Plowman converted with a splendid kick from near the touch-line.

However, just before the interval Dunn gave the Scottish the lead following good work by Bruce-Lockhart, and Fyfe added the goal points.

After the interval the home side increased their lead when Dunn on two occasions slipped past Boyd and registered tries, one of which Fyfe converted. Clever positioning showed how valuable the inside pass can be, and Bruce-Lockhart, Dunn and Lucas carried out many spectacular movements.

After splendid passing, Swanson and Fyfe both crossed for tries, and on one occasion Adair added the goal points.

Although Fyfe dropped a goal, the Hospital never gave up trying, and in spite of the fact that they did not add to their score, they put up a very good performance.

Team.—R. D. Plowman; J. L. G. Hartley, C. B. Boyd, R. U. F. Kynaston, R. F. Camp; L. Babrow (captain), J. W. Lewis; J. Rochford, R. M. Sharpe, P. A. Lane-Roberts, A. Forbes, J. C. Bulstrode, P. Fletcher, D. N. Fuller, D. P. Finnegan.

Guy's v. Devonport Services

(*At Honor Oak Park on Saturday, February* 26.)

AFTER establishing a lead of three points at half-time, Guy's were beaten by a dropped goal and 2 tries (10 points) to a try (3 points).

The game was spoiled by a continuous downpour which made the ground very heavy and sticky. However, the conditions appeared to suit the Services, who revelled in the mud, and their backs handled a slippery ball exceedingly well.

The success of the visitors was due chiefly to their pack, which was much heavier than Guy's. Unfortunately, the Hospital were only able to field three of their regular forwards, and with Van Steytler still on the sick list they were compelled to rearrange their back division.

Thanks to Sharpe's brilliant hooking, Guy's obtained their share of the ball in the set scrums, but Halamandres was so closely marked by Kelly and Slocumbe, the Services' wing forwards, that he had few chances to set his backs in action.

Devonport started strongly, and Guy's did well to keep out a strong attack in the first few minutes. In spite of the fact that they were outweighted, Guy's had the ball back from most of the scrums, but the backs could make little headway.

Against the run of play, Guy's scored first when Fletcher led a grand forward rush and dribbled the ball to the Services' 25, where Sharpe, King-Turner and Rochford carried on, and eventually Rochford touched down for a try which Plowman just failed to convert.

Following this success, Guy's improved and Babrow found an opening, and sent Kynaston and Camp in full cry for the line, but Hogg came across and saved.

Near the interval the Services nearly drew level following a fine bout of passing between Clayton-Greene, Downs and Hogg. The latter was pushed into touch near the corner flag, but eventually he flung out a long pass to Webb and Aylen, who had the line at their mercy, but Attwood knocked on at the critical moment.

Devonport Services started the second half at a tremendous pace and Guy's had to defend their line immediately. Following a five-yard scrum, the ball came out to Clayton-Greene, who cleverly eluded all attempts to tackle him, and finally he sent Kelly over for an unconverted try.

Babrow did his utmost to get the Hospital three-quarter line moving, but the slippery ball appeared to baffle them and mistakes were frequent.

Although Fletcher led the forwards magnificently, they were not equal to the Services' pack in the open, and as the game progressed it was apparent that the visitors would last longer.

Midway through the second half, they pressed strongly and finally the ball was whipped out to Bailey, who dropped an easy goal.

Guy's rallied, and a sparkling movement between Kynaston and Babrow carried play from one end of the field to the other, but a knock-on spoilt a grand effort.

The Services retaliated and, following a long punt ahead, their forwards caught Kynaston in possession and, although Aylen touched down in an easy position, Attwood was unable to add the goal points.

In the closing stages with Fletcher to the fore, Guy's rallied amazingly, and on two or three occasions it seemed that they might reduce the deficit, but the Services' defence held out.

Team.—R. D. Plowman; J. L. G. Hartley, J. P. Crawford, R. U. F. Kynaston, R. F. Camp; L. Babrow (captain), C. Halamandres; J. P. Rochford, R. M. Sharpe, P. A. Lane-Roberts, J. C. Bulstrode, P. Fletcher, A. M. McCall, D. P. Finnegan, D. N. Fuller.

Rugby Fives

A GENERAL Meeting was held on January 27th to elect officers for next season. C. H. G. Chase was elected Captain, J. W. Stephens Hon. Secretary, O. H. E. Boyles Medical and N. A. Stork Dental Members of the Committee.

We are glad to be able to announce that we have secured St. Bartholomew's Hospital Fives Courts on Saturday afternoons. All members desirous of availing themselves of this offer should communicate with the hon. secretary.

The Annual Supper will be held at the Cheshire Cheese on Friday, March 3rd. Tickets may be obtained from any of the officers of the Club.

On Saturday, January 28th, we played our first match of the year against University College School. C. H. G. Chase and M. A. Barker won all their six games, although P. D. Record and J. L. Fletcher of our opponents put up a great fight in one game, just losing (14—16).

J. H. D. Menzies and J. W. Stephens won three and lost three games, unfortunately striking a bad patch in the fifth game, losing game love.

C. H. G. Chase and M. A. Barker *v.* P. D. Record and J. L. Fletcher, 16—14, 15—11, 15—3.

C. H. G. Chase and M. A. Barker *v.* P. H. Woollen and D. R. Lucas, 15—9, 15—9, 15—6.

J. H. D. Menzies and J. W. Stephens *v.* P. D. Record and J. L. Fletcher, 3—15, 15—10, 0—15.

J. H. D. Menzies and J. W. Stephens *v.* P. H. Woollen and D. R. Lucas, 10—15, 15—12, 15—13.

Result.—Won, 149—132.

Boxing

Inter-University Boxing Championships

UNITED HOSPITALS WIN HARRY PRESTON TROPHY

THERE were several highly interesting finals to the twentieth annual boxing championships of the Universities and Hospitals of Great Britain, held at the Stadium Club on February 10th last.

Additional significance attached to the tournament this year in view of the fact that four Guy's men represented United Hospitals, and the competition for the Harry Preston Trophy soon resolved into a battle between the holders, Trinity College, Dublin, and United Hospitals.

Three of the four Guy's representatives succeeded in winning U.A.U. titles, the Club Challenge Trophy being won by the Hospital's team with 27 points. Trinity College (Dublin) were second with 16 points, and London third with 13.

A splendid programme provided an enthusiastic crowd with plenty of thrills, for not one of the contests staged was on the dull side. The team spirit and do-or-die fighting of the undergraduate fighters always makes the university gathering a memorable one, and the bouts on this occasion were no exception.

Professor E. P. Stibbe and the Committee and members of the United Hospitals' Boxing Club are to be congratulated for carrying out so efficiently the organisation of these championships, in which keenness and spirited fighting were the keynotes.

At the conclusion of the tournament Sir Girling Ball, F.R.C.S., presented the U.A.U. silver medals to the winners of the individual weights, and the Harry Preston Challenge Cup to J. W. G. Evans, captain of the winning Hospitals' team.

In the flyweight division R. N. Lewis (United Hospitals), the sturdy Guy's captain, won his semi-final bout by beating R. Burns (Trinity, Dublin) on a knock-out in the first round. Against W. Solomon (Birmingham) in the final, Lewis rather foolishly remained on the defence, until the last round when he shook the Birmingham man with a fusillade of punches. This spectacular rally impressed the judges, giving United Hospitals their first victory.

J. I. Stafford (Trinity, Dublin), a vigorous, nuggety non-stop fighter, proved too experienced a campaigner against E. Harvey (United Hospitals) in the bantam-weight final. Harvey revealed a fast left, but Stafford punched with the utmost resolution and, wading in with hard rights and

lefts in the second round, forced the Guy's man to the canvas for the full count. In his semi-final bout, however, against A. F. Denye (Liverpool), after taking the first round with crisp punches, Harvey fought well to shade his opponent in a narrow points' victory.

A. A. Halamandres put United Hospitals ahead when he beat G. Harris (London) in his feather-weight semi-final bout. Both men waded in from the beginning and hit hard and repeatedly, Halamandres giving a polished display of clean two-handed punching. As the fight progressed Halamandres continued his flailing attack, crowding on all sail in the final round to take the decision from his London opponent.

The feather-weight final proved a bright contest, Halamandres attracting attention by his display of fast boxing and emerging a comfortable winner by cleverly outboxing D. Davis (Liverpool). The latter tried to crowd his man and, taking advantage of his opponent's momentarily unprotected chin in the first round, he landed a smashing blow, flooring his man for a short count in the early stages of the fight. But the Guy's man took the honours by his more polished methods, coupled with the use of a dangerous left.

The lightweight division produced some hectic fighting, and most of the competitors displayed form which would have earned them a title in former years. Costa Halamandres (United Hospitals) proved himself the outstanding lightweight on view when he brought to light all the best features of boxing and easily outpointed E. Wright (Leeds) in the semi-final of the division.

Again in the final the Guy's man featured in a very interesting and well-contested bout. The punching was hard and fast and cleverly directed, Halamandres scoring with an effective left, varied with well-timed right hooks and uppercuts. At the close of the contest Halamandres was awarded a merited and popular decision, this being the third U.A.U. title won by Guy's men during the course of the evening.

Of the other contests little need be said, except that the most popular bout of the evening was the welter-weight final, in which G. W. Craigie (Trinity, Dublin) and J. W. G. Evans (United Hospitals) had the crowd in an uproar both of applause and excitement throughout the three rounds. They had each other groggy and literally fought each other to a standstill, Craigie gaining the verdict after a gruelling bout and finishing the stronger. Evans was given a big cheer for a stout-hearted display.

RESULTS

The results of the finals were as follows :—

Flyweights.—R. N. Lewis (United Hospitals) beat W. Solomon (Birmingham) on points.

Bantam-weights.—J. I. Stafford (Trinity, Dublin) beat E. Harvey (United Hospitals) on a knock-out in the second round.

Feather-weights.—A. A. Halamandres (United Hospitals) beat D. Davis (Liverpool) on points.

Lightweights.—C. Halamandres (United Hospitals) beat W. B. Smith (Trinity, Dublin) on points.

Welter-weights.—G. W. Craigie (Trinity, Dublin) beat J. W. G. Evans (United Hospitals) on points.

Middle-weights.—G. P. Scott (United Hospitals) beat T. B. Voice (London) on points.

Light-heavyweights.—M. H. Norman (London) beat P. J. A. Horan (University, Galway) on points.

Heavy-weights.—T. O'Donnell (Dublin University) beat F. G. Hardman (Manchester) on a knock-out in the second round.

G. R. W. N. LUNTZ.

United Hospitals Hares and Hounds

BEFORE the 1938-39 season opened the United Hospitals Hare and Hounds and the United Hospitals Athletic Club combined to hold a dance at the Wharncliffe Rooms, which was a great success in spite of being in the week following the Crisis.

For the first time in our history we have acquired our own headquarers, which are at the Dysart Arms, Richmond Park. This is a great advantage, and has been the result of really hard work by the senior members of the Club, not only in organisation, but also in the actual construction.

We opened this new stage in our career by a race against Thames Hare and Hounds, the club of which our founder, the late Dr. Kent-Hughes, was a member. We lost this match in spite of an excellent win by A. E. J. Etheridge (Guy's), who beat this year's Southern Counties champion, Mackintyre. Later in the season we beat Reading University, when our scoring team was split by only one man, but lost to both Oxford and Cambridge.

The most encouraging feature of the past season has been the number of "A" fixtures it has been possible to make, and the keenness with which they have been run, so that we hope to have even more next year. In addition a Guy's "A" team met an Orion Harriers Junior

team last January, and although we lost this by 16 points to 20 points, we are probably the only Hospital at present able to run a team without calling on their first team United Hospitals runners.

At the conclusion of what has been a very flourishing season there was a record entry of over 50 competitors, representing six hospitals, in the Inter-Hospital Cross Country Championship over five miles for the Kent-Hughes Cup. The Championship was more keenly contested than it has been for some years, especially by Guy's and Bart.'s, who seemed certain to be very close.

A. E. J. Etheridge (Guy's) led almost all the way round to beat J. P. Haile (Bart.'s) by just over 1 min. Next came G. A. Beck and E. J. Atkinson, both also of Bart.'s; then, fifth and sixth, two Guy's men, R. Merryweather and H. C. Martin. It was now clearly a straight fight between the two Hospitals, and Bart.'s were 3 points less. Three men from other Hospitals now finished, after whom came D. J. Lyon (Guy's), H. B. Lee (Bart.'s) and B. P. Griffin (Guy's), in that order. Thus Guy's had their scoring team home in 34 points, and as the next place was a tie between H. A. Ripman (Guy's) and Van de Lind (Bart.'s), each scoring 13½, Bart.'s were home in 33½, and thus won by ½ point.

Last year Etheridge equalled Dr. H. A. Munro's (Guy's) record of five consecutive wins of this race, so that by winning it again this year he now holds the record alone. Dr. Munro watched the match and later made the first presentation, to Etheridge, of the "Munro Trophy," which is to be held by the individual winner of the race, and will be engraved with the names of the past winners. In spite of a very strenuous race in the Southern Counties on the Saturday before, Etheridge ran a very fine race indeed, and at no stage did he seem in any danger.

R. Merryweather, running in his first Kent-Hughes, did extremely well to finish fifth, and promises to be a very useful runner.

H. C. Martin ran an average race, finishing sixth; while both D. J. Lyon and B. P. Griffin were well above their usual form, and are very much to be congratulated, as is H. A. Ripman, who well deserved his win of the Guy's handicap.

Of the rest of the Hospital team, all showed great keenness and promise, so that we may look forward to next year in the hope that the Kent-Hughes will return to the 'Spit mantlepiece—where we have come to feel that it belongs.

Result of the Kent-Hughes:—

St. Bartholomew's, 33½ pts. (2, 3, 4, 11, 13½).
Guy's (holders), 34 pts. (1, 5, 6, 10, 12).
London, 85 pts. (7, 9, 19, 22, 28).
St. Thomas's, 111 pts. (18, 20, 21, 25, 27).
Royal Dental, 152 pts. (8, 33, 36, 37, 38).
St. Mary's did not close in.

Hospital Information, etc.

Notices

Applications are invited for the post of Medical Registrar for the period ending 30th September, 1939. Applications should be sent immediately to The Dean, The Medical School Office, Guy's Hospital, S.E.1.

An invitation has been received from the Guthrie Society, Westminster Hospital, W.C.1, for the Staff and Students of Guy's Hospital to attend a Special Meeting, when Lord Horder will speak on "The Approach to Medicine," in the Sir E. Meyerstein Theatre, of Westminster Hospital Medical School, on Thursday, March 16th, at 8.30. Refreshments will be served at 8 p.m.

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Changes of Address

Dr. J. Lansdowne Perceval, Childe Okeford, Blandford, Dorset.

Births

GREWCOCK.—On 28th February, 1939, at 44 Wickham Way, Park Langley, Beckenham, to Marjorie, wife of Ronald J. G. Grewcock, L.D.S., R.C.S. (Eng.)—a daughter.

EDS. { C.H.E. W.D.B.

GUY'S HOSPITAL GAZETTE

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PASSIM

COMMENTS crowd to the mind as a result of the recent doings in central Europe, but this journal has a reputation for reticence where politics are concerned, and we shall restrict ourselves to-day to congratulating our erudite contemporary, the New York *World Telegram*, for the happy quotation, published the day after Mr. Chamberlain's speech at Birmingham: "Beware the fury of the patient man."

NOT for the first time we call our readers' attention to the dangers of capitulating to the lures of the advertisers of patent medicines. Their appeals to the general public are usually absurd enough to appear ridiculous to members of the medical profession; indeed they invite parody, as was well done in a recent clinical lecture published in the *Gazette* on *Starvatio Nocturna*. But when they apply themselves to the medical profession direct, their attack is the more dangerous because the more insidious.

What busy practitioner can be confident of immunity from the conditioned reflex set up by the constant association of some easily remembered name and the disease it sets out to cure? The practitioner is busy, and the large majority of advertisements with which he is bombarded through the post must go straight into the waste-paper basket. But here lies the skill of the advertiser—his production is not meant to be read thoroughly. Anything more than a cursory glance at the breakfast table, before it reaches its proper destination, would invoke criticism, and so distrust, so he words his advertisement simply and vaguely, relying much on the name of his preparation. This is chosen for its similarity in the Græco-Latin jargon that we use to the name of some anatomical part or disease process, so that its use is immediately suggested to medically educated readers.

Thus the conditional reflex is built up. Many factors unite to maintain it. First, and most sinister, the patent medicine is easy to prescribe. You write its name on a piece of paper and the chemist does the rest. There is no worrying about incompatibles; no need to remember (or be forced to look up) cumbersome prescriptions. Secondly, it usually seems quite as effective as any alternative. For the patent medicine is often the same drug, or combination of drugs, as is recommended in the textbook of Medicine, only retailed at four or more times the cost of the drug as prescribed. Thirdly, the patient likes it. This, of course, is no small contributory factor to its efficiency. The advertiser has been at him too, and when he is advised by his doctor to take the medicine the seal of orthodoxy is placed on much of the suggestive advertising material with which he has come in contact. Needless to say, this has effects which are far-reaching.

Let it not be thought that we forget those many proprietary remedies which are universally admitted to be a proper part of treatment, and which are put up, for the most part, by reputable firms. Our object is to bring out what is an undoubted fact, that the promiscuous prescribing of proprietary brands of medicine makes for sluggishness of mind on the part of the practitioner, and increases by four and five times the necessary, the expense to which the patient is put to. For the patient pays in the end, not only for his medicine but also for the gay and well-prepared advertisements that fill our waste-paper baskets.

THAT there is nothing new in the world is an observation dear to the human mind, and we published recently advertisements from a newspaper of the early part of last century showing that the present mode of advertising medicines to the public was no new thing. Here is another

such example, interesting in that it appeals to the medical profession. It occurs in a news-sheet of 1712: *As I was passing along to Day, a Paper given into my Hand by a Fellow without a Nose tells us as follows what good News is come to town, to wit that there is now a certain Cure for the French Disease, by a Gentleman just come from his travels, who offers for a Modicum to instruct all Physicians and Apothecaries of London, in the Use of it.*

And in the same paper: *In Russel-Court, over against the Cannon-Ball, at the Surgeon's Arms in Drury Lane is lately come from his Travels a Surgeon who hath practised Surgery and Physick both by Sea and Land these twenty-four years. He (by the Blessing) cures the Yellow Gandice, Green Sickness, Scurvy, Dropsie, Surfeits, long Sea Voyages, Campains and Women's Miscarriages, Lying-in, etc., as some People that have been Lame these thirty years can testifie; in short, he cureth all Diseases incident to Men, Women or Children. And since he is now something beyond the Prime of Life, he offers to open his Art to any Physician or Surgeon that comes to him, nor is that Instruction onerous, for that he possesses, and only knows the Secret Composition thereof, that Elixir that will make short and easy what was formerly painfully learnt, the Practise of Physick.*

ON Friday, March 31st, Dr. Marshall has arranged for Dr. J. Lovelock to give a clinical lecture on "Medical Aspects of Athletics." Most people will remember that Dr. Lovelock has a unique record as a long-distance runner. He has studied the physiology of sport, and his opinion as to the best methods of training should be valuable.

Obituary

CUTHBERT HILTON GOLDING-BIRD

Late Senior Consulting Surgeon to Guy's Hospital

THE death on March 6th of this year of our Consulting Surgeon at the age of ninety ends the connection of his family with Guy's which has lasted since 1832, when his father entered at Guy's, being then eighteen years old. His industry and ability quickly attracted the attention of Astley Cooper, Bright and Addison, and in 1835 he was appointed to lecture on "Medical Physics." Four years later he published his popular textbook, "The Elements of Natural Philosophy," which went through many editions. In 1843, on the retirement of Bright, he became Assistant Physician, which post ill-health compelled him to resign at the end of 1853. He had rheumatic valvular disease of the heart, from which he died in 1854, aged 39.

He was an exceptional man. Although so short-lived, he has secured a place in the "Dictionary of National Biography." He became F.R.S. in 1846. His industry was overwhelming; the life of him in the *Guy's Hospital Reports* for January, 1926, gives references to over ninety papers by him. He is now best remembered by his book on "Urinary Deposits"; this went through five editions. He was a good teacher and an excellent clinical physician. As a new children's ward has just been opened at Guy's, it is interesting to find that Dr. Golding-Bird was in charge of the Children's Department at Guy's and that by his writings he did much to teach the profession the importance of the study of children's diseases.

His brother, Dr. F. Bird, was obstetric physician to the Westminster Hospital. Dr. Golding-Bird married Miss Brett; after his death she founded at Guy's, in memory of her husband, the Golding-Bird Gold Medal and Scholarship for Bacteriology. There were five children.

Cuthbert Hilton Golding-Bird, the fourth child, was born on July 7th, 1848. He was educated at Tonbridge and King's College, London; he also studied in Paris. He graduated B.A. in 1867 and M.B., with the Gold Medal in Forensic Medicine, in 1873 at the University of London.

In 1868 he entered as a student at Guy's and won the First Prize for first-year students at the end of his first year, the First Prize at the end of his third year, and in 1872 the Treasurer's Gold Medal for Surgery and also that for Medicine. About 1874 he determined to practise as a surgeon, for in that year he passed both the Primary and Final Examinations for his F.R.C.S. In the same year he was made a Demonstrator of Anatomy in the Dissecting Room. In this post he was excellent and popular, for he took endless trouble to make the students understand. In those days many of them were much mystified by the descriptions in the textbooks of the folds of the peritoneum. Golding-Bird made a wooden model, and when demonstrating on the peritoneum folded a towel over the model, making the matter as clear as noonday.

Next year, namely in 1875, he was elected Assistant Surgeon to the Hospital. He remained

Demonstrator of Anatomy for a year or two, but then moved to the Physiology Department, where he was Demonstrator, Dr. Pye-Smith being the Lecturer. This was the arrangement for some years, but when Dr. Pye-Smith gave up the Lectureship in Physiology, Golding-Bird succeeded him and Wooldridge became Demonstrator of that subject. On his death, Washbourn and Starling took his place, later on Fawcett and Hopkins were Demonstrators. Golding-Bird resigned the Lectureship in 1893, as he was then appointed full Surgeon and Washbourn and Starling took charge of it. Guy's had indeed been fortunate to have in its Physiology Laboratory such physiologists as Wooldridge, Starling and Hopkins, and all at the same time.

C. H. Golding-Bird

Golding-Bird had great manual dexterity; when he was teaching physiology he cut by hand with a razor, the only way then of cutting histological specimens, a section of the retina so good that it has been used in "Quain's Anatomy" as an illustration from then down to the present day. This skill, combined with unusual mechanical aptitude, stood him in good stead in surgery. He was a fine operator, his opinion was much sought for orthopædic and spinal deformities. He was one of the first to attempt the treatment of ulcerative colitis by opening the appendix and washing the large bowel through. He designed an ingenious little apparatus for giving a wide opening into the trachea after tracheotomy for diphtheria, a matter of great importance in the days before the discovery of diphtheria antitoxin, for children often died because they could not cough up the membrane through a tracheotomy tube. He was Consulting Surgeon to the Royal School for Deaf and Dumb Children, and there came across some children suffering from idioglossia, in which the children speak a language of their own, which no one else can understand. He showed them to me, we recorded their speech on the newly discovered gramophome, in which, with his mechanical turn of mind, Golding-Bird was much interested. Then we had them trained to speak properly so that we were able, at a medical meeting, to demonstrate their faulty speech and exhibit them speaking as other people. He was an excellent teacher both in the wards and in the Lecture Theatre, students enjoyed working with him, many of his old dressers and house surgeons remembered him affectionately all their lives.

Being very fair, he always looked youthful. A woman with a bad compound fracture of the leg lay in one of his beds; he kindly explained to her that he must amputate. She said: "What! have my leg cut off by a boy like you? Not if I know it. He can do it if you like." She had pointed to the House Surgeon. His name bothered some of the hospital patients; I once met a man in the Colonnade who asked where he could find Mr. Golden Pheasant!

His chief hobby was intricate clocks; his recreation was to take them to pieces, mend them, and put them together again; his triumph was when he got an old clock, completely out of order, to work again and play long tunes every quarter of an hour on all sorts of instruments.

During the time he was Assistant Surgeon he lived in St. Thomas's Street, opposite the church. In those days the Assistant Staff were compelled to live within a mile of the Hospital, for there were no telephones, no motors and no Resident Surgical Officers. When he became full Surgeon he moved to 12, Queen Anne Street. The day after his retirement from the Hospital at the age of sixty he went to live at his house at Meopham, in Kent, where he died at the age of ninety.

These thirty years were occupied by work on various local committees, by gardening, of which he was very fond, by his clocks and by writing a history of the Parish Church of Meopham. This was well reviewed and attained the distinction, rare among books of its kind, of reaching a second edition.

Meeting his professional brethren gave him great pleasure. Although well over eighty, he came from Meopham to preside at a dinner of the United Hospitals' Club. He made a long and admirable speech on the History of the Club, stayed till the end of the dinner—well after eleven, took a cab to Charing Cross, then the train to Gravesend, where his car met him, and he arrived home after one, none the worse for the trip which he had made all alone. Subsequently he published an exhaustive history of the Club.

Lastly, mention must be made of his kindness to those in trouble; he was always anxious to help. Many owe much to him, but he never talked about this or his own troubles. All who knew him well were very fond of him.

W. H.-W.

Mr. C. H. Golding-Bird died on the 6th March, 1939, at "Pitfield," Meopham, Kent. Aged 90.

Since his retirement to his beloved country house at Meopham, although never physically strong, he has enjoyed a happy and peaceful life. Apart from his profession he had many and varied interests. Most mornings he would be found working in his beautiful garden, and the writer has seen him busy with his gardeners, mending fences and gates. He was an ardent archæologist and a member of the Kent Archæological Society, and spent time and money in collecting many valuable and unique treasures, until his house became a veritable museum. His book, "The Story of Old Meopham," and a later edition, "The History of Meopham" is a memento of his energy and a digging into the past. He was a keen horologist, and at noon to hear all the clocks in his house striking the hour was an experience. I believe he has several very old clocks and watches.

Years ago he did some very fine photography, and the writer has seen him delicately and beautifully painting the lines of the developed negative. His knowledge and experience was so extensive that it seemed impossible to start any subject which he was not fully acquainted with.

He was a strong Churchman and at one time served as churchwarden both in London and Meopham. The writer has lost a great and generous friend of nearly forty years' standing. He is under a lifelong obligation for his many acts of kindness and assistance. He was always pleased to see with the writer any difficult surgical case, and his diagnostic acumen was sometimes uncanny. He possessed the wonderful faculty of instilling confidence, and if he said a certain course should be adopted, there could be no other. He would never accept a fee for his services.

Some two years ago he developed angina and asthma attacks, with most distressing dyspnœa, and although his mind was as active and subtle as ever, he was unable to do any physical work or gardening, and had to spend a sedentary life. His wife died on the 23rd March, 1919—an irreparable loss. He had no children. A great and good man has passed on.

S. A. E. G.

Empyema in Childhood

A Clinical Lecture delivered at Guy's Hospital by H. C. Cameron, Esq., M.D.

GENTLEMEN,—Empyema is a disease very much more common in childhood than in adult age, and the younger the child the more common it becomes. In the first year of life, and to some extent in the second year, it has a very high mortality. The mortality varies perhaps in different years and in different places, but few large series of cases in the first year of life show less than a 50 per cent. mortality. This is in striking contrast with what we find in older children and in adults when uncomplicated empyema, if we except that associated with the pneumonias of epidemic influenza, and those which are secondary to tuberculosis of the lung, is rarely fatal. The first thing we must ask for in considering empyema in infancy is an explanation of this high mortality. Why do half the infants affected die, and why does the death-rate fall suddenly to quite a low level after the third year is reached?

Pneumococcal empyema is by far the most common, and it is of pneumococcal empyema that I shall mostly speak. Streptococcal empyema also occurs at times, and its features may be contrasted with those of pneumococcal empyema. Staphylococcal empyema is even less common.

It is, I think, always of favourable prognostic significance when the appearance of the empyema is separated by a distinct interval of time from the preceding pneumonia—that is to say when, after the temperature has fallen by crisis or lysis, there are a few days of normal or almost normal temperature before the chart indicates the beginning of a renewed state of irregular pyrexia. Such empyemas may be called metapneumonic. Sometimes this form of empyema may be remarkably latent, without high fever or dyspnœa. The child at the most may be found pale, fretful, prone to perspiration or diarrhœa, and with a steady loss of weight, after a respiratory illness, often passing as bronchitis, from which he is thought to have recovered. The diagnosis may be made only in the course of a general physical examination, undertaken to determine the cause of these vague symptoms, carried out some weeks, sometimes even some months, after the original illness. The mother may have no suspicion that there is anything wrong with the child's chest, yet upon examination there may be diminished movement, dulness to percussion, diminished voice sounds, breath sounds and tactile vocal fremitus, or distant bronchial breathing and bronchophony upon the

affected side with displacement of the heart to the opposite side. At the same time an X-ray examination may show an extensive effusion and a radical operation, performed at once, may dislodge a pint or more of pus from the chest of a child apparently so little incommoded. This latency is indeed very characteristic of a residual collection of pneumococcal pus imprisoned anywhere in the body. We meet with a similar latency, for instance, in the later stages of pneumococcal peritonitis and pneumococcal pyopericardium. With a streptococcal infection such quiescence and absence of severe constitutional symptoms are not at all likely to occur.

Even in infancy the outlook, as regards life, in these metapneumonic empyemas is very favourable. Nevertheless a long delay of weeks or months is not to be regarded as a thing to be desired. The risk of permanent damage to the lung and of failing to achieve its complete expansion becomes greater the longer the interval which intervenes before the pressure of the imprisoned pus is relieved. Moreover, after an interval which is hardly ever less than eight or ten weeks, the pus is liable to find its own means of exit, by rupturing into one of the medium-sized bronchi of the compressed and airless lung. The pus is then expectorated, sometimes in large amounts, under the stress of severe paroxysms of coughing. Perhaps because of the tortuous course of the fistulous communication, and because its purulent contents act as a water valve, pyopneumothorax does not commonly occur. It was, of course, by such fistulous drainage that this type of empyema recovered in days before operation or even paracentesis was commonly performed. Rupture upon the surface of the body, usually in front in the neighbourhood of the nipple, was much rarer. Sometimes the pus burrowed into the pericardium or through the diaphragm to escape by rupture into the bowel. If the empyema was small, inspissation and calcification could also occur.

The high mortality in empyema in infancy is not found in these quiescent metapneumonic cases which follow the pneumonia and are detected after an interval of days, or it may be weeks or months. The high mortality is synpneumonic—that is to say, the empyema develops during the height of the pneumonic process and of the accompanying bacteræmia and intoxication. The symptoms due to the empyema, the rise of temperature for example, are then blended with and superimposed upon the more severe symptoms of the pneumonia. Among children over two years of age and among adults, synpneumonic empyema, in pneumococcal infection, is the exception and not the rule, because lobar pneumonia with them is a short severe illness terminating abruptly by crisis. But in infancy only a minority so terminate. In very many cases the infection is prolonged over many weeks, and when the empyema forms the child is still suffering from an active pneumococcal infection.

In 1923, Dr. O. Osman and I investigated records of all cases of empyema admitted to the medical wards of the Hospital in children under two years of age; between the years 1911 and 1920 inclusive. Of 52 such cases, 13 recovered and 39 died. At that time the radical operation with removal of a rib was almost invariably practised. All of the 13 who recovered and of the 39 who died were submitted to this operation. In 20 of those who died no operation had been performed, either because the child had died without the empyema being found, or because it was considered too ill to undergo the operation.

Of the 13 cases which recovered, 12 were clearly and undoubtedly metapneumonic. One only was synpneumonic.

Of the 39 cases which died, none was clearly metapneumonic, 34 were clearly synpneumonic, and in five the interpretation for various reasons was doubtful.

Of the 12 metapneumonic cases, all of which recovered, in only two was the whole course of the illness observed in hospital, so that the temperature chart records the initial pyrexia due to the pneumonia, the fall, and later the renewed irregular pyrexia due to the empyema. In the other ten the original pneumonia had taken place before admission, and the child came to hospital suffering from the residual empyema. In three cases long periods—three, five and six months respectively—had passed since the pneumonia. In each case the radical operation with removal of a rib had had complete and almost always immediate success. The reports tend to take on an almost jubilant tone as they record the rapid gain of weight and the steady return to health. The result of the same operation performed upon 19 synpneumonic cases was very different—nine died within 24 hours of operation, nine at varying intervals thereafter. One single case made a recovery.

I have mentioned these old 1925 studies in empyema, all submitted to the same radical operation, because they seem to me to help us to determine the line of treatment which we should adopt to-day. If we have to do with a quiescent metapneumonic empyema, a residual collection of pus shut off by adhesions, and localised in some part of the pleural cavity, usually but by no means always the base, then I think we can seldom do better than provide the freest drainage possible by removing part of a rib and inserting a large and rigid tube. The result in such cases is almost

invariably completely satisfactory. Paracentesis, too, will bring about recovery, but more slowly and with hesitation. Empyema of this sort seems determined to recover whatever the treatment, or even without treatment. The radical operation is the quickest and most satisfactory means of removing the danger of permanent damage to the lung.

If, on the other hand, as is more common, we have to deal with a synpneumonic empyema, while the child is still struggling with the effects of the acute pneumococcal infection, and while extensive areas of lung are still solidified, we must delay operation and rely upon paracentesis to remove the purulent exudate when it seems sufficiently large to be causing embarrassment. In the one case the child has recovered from the main assault and we are dealing with a residual quiescent complication; in the other the child is still struggling with the generalised infection. It is this fundamental difference which makes so meaningless those communications which we see from time to time in the medical journals comparing the mortality of different methods of treatment and attempting, on the grounds of the percentages of mortality, to assess their relative value.

To compare the results of a hundred cases of empyema treated by open drainage, with removal of rib, with the results of a hundred cases treated by conservative methods is of no value unless we know how many cases in each series were metapneumonic and how many were synpneumonic, because it is probable that all the metapneumonic cases will recover, and very many of the synpneumonic cases will die, whatever the method adopted. Death is indeed seldom due to the empyema itself. In the fatal cases in our series, extensive consolidation of one or both lungs was generally found, while pericarditis was present in ten instances, peritonitis once, and meningitis once.

The deaths in synpneumonic cases were due then to the virulence and spread of the pneumococcal infection. They were not due to delay in taking action to drain the pleural exudate. If the high mortality is to be lowered it must be by means which avail to shorten and control the pneumococcal infection, by antipneumococcal serum, or perhaps by the new drugs of the sulphanilimide group. We can, however, be certain that the radical operation with removal of a rib is unsuitable and not seldom directly fatal in synpneumonic empyema. Operation in empyema is no emergency operation. The time to operate is the most important decision to make, and delay is often the wiser course. Because of the resilience of the thoracic cage, and because of the high and unimpaired elasticity of the lung in childhood, the subsequent expansion of the lung and the obliteration of the space which was formerly occupied by the empyema seldom causes the difficulty which is not uncommon in adult life with a more rigid thorax and a less elastic lung.

So much for pneumococcal empyema — a localised exudate surrounded by adhesions which may form during a pneumonia or persist long after the pneumonia is over. We may contrast with this what is called a streptococcal empyema. In streptococcal empyema it is seldom that there is evidence of a coincident or underlying infection of the lung, except perhaps in cases which complicate epidemic influenza. The pleural cavity appears to be primarily involved, and involved often in its full extent. We have to deal, not with a localised abscess, but with a true pyothorax.

The pleural infection is often a complication of streptococcal infection elsewhere, most commonly of course, of the tonsils and cervical glands. Sometimes the picture is that of a bacteræmia or septicæmia.

"A small boy, two years old, had a sore throat with some enlargement of the glands in the neck, from which after a week he seemed to be making recovery. His temperature then rose again, his left knee-joint became hot and swollen, and he complained of pain in his right side. The pain and swelling of the knee gradually subsided during the next few days, but 24 hours later there were signs of fluid in the left pleural cavity. Three days later fluid becoming purulent, from which streptococci were cultivated, was withdrawn. I say 'becoming purulent' because it is characteristic of streptococcal pleurisy to show at first a thin serous fluid, opalescent perhaps, which gradually becomes turbid and finally so thickly purulent that aspiration may become impossible. In pneumococcal exudates the serous stage is so short that almost from the first we encounter the thick greenish pus. Incidentally there is another characteristic of streptococcal pus which you should recognise lest you are misled by it. The most purulent part falls to the bottom of the exudate by sedimentation, so that there may be a stage in which a needle inserted high in the thorax yields a comparatively clear serum, and one inserted simultaneously low down in the chest thick pus, or during paracentesis a purulent flow may be followed by one which is much clearer. A sample removed by the syringe cannot always be taken as representative of the whole.

"After two more days, Mr. Brock inserted a canula into the pleural cavity, which was left *in situ* for a week. At first frequently, later at longer intervals, gentle suction by a syringe removed about 5 or 6 ounces of purulent fluid

which latterly tended to become clearer. After a week the fluid ceased to come away readily and the canula was withdrawn. No radical operation was required. Repeated X-ray examinations showed the gradual diminution of the opacity and the satisfactory expansion of the lung. Recovery was complete and permanent."

"Two little boys, aged 4 and 6, were walking with their mother on a foggy frosty morning. On the slippery roads a passing bus skidded and ran into the family party. The mother was killed and her body was imprisoned under the bus, which had to be jacked up to release it. The boys were not struck seriously, but were left in a shocked, dazed condition in the cold and fog for an hour, while all attention was concentrated on the condition of the mother. Three days later I saw them in bed side by side. The younger had developed otitis media. Later, Mr. Mollison operated on the mastoid. The elder boy had a sore throat and a streptococcal pleurisy, which was three times treated by paracentesis. At a fourth attempt, 14 days after the accident, the pus had become so thick that the needle became blocked. A radical operation with removal of a rib was then performed, and he made a complete recovery."

These cases illustrate the difference between pneumococcal empyema and a streptococcal pyothorax. With the latter it is very necessary to delay active measures. In the first place because, as Case 1 shows, they may never become necessary. In the second place, because adhesions are slow to form, and it is long before the purulent collection becomes localised and before the mediastinum becomes fixed and stabilised.

In infancy and early childhood most fluid effusions will prove to be due to the pneumococcus, less often to the streptococcus. Tubercular empyema is very rare. The only common cause of a serous effusion in childhood, and most commonly not in infancy but in later childhood, is a serous effusion secondary to early tuberculous infection. The physical signs in such a case may be identical with those of empyema, but the general situation and symptoms may serve to distinguish them. Children with a serous effusion are likely to be less ill than children with empyema; there is no history of a past acute pneumonia and no evidence of streptococcal invasion with sore throat, cervical adenitis, etc. There is, on the other hand, often the history of contact with a case of active tuberculosis. The Mantoux test is positive, and the blood count does not show a high polymorphonuclear leucocytosis. The ultimate decision may rest with fluid withdrawn by an exploratory needle. The fluid removed shows a lymphocytic, not a polymorphonuclear, reaction.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.
(*continued*)

After this a young man (under thirty) who had had a radical operation for carcinoma of the rectum. Later he developed one in the colon, and had an ileostomy and resection of the whole colon in two stages. In the removed specimen were four separate carcinomata, and a number of polypi.

The dressing of the ileostomy (also used in New York) is with ordinary aluminium powder, as sold to mix for painting exhaust pipes, etc.

One part aluminium powder; add enough mineral oil to make an oily mass; two parts of zinc oxide ointment. (This was the formula given me; I do not believe they all add the zinc oxide.) The stuff is not cleaned off, but, after a superficial cleaning, a fresh lot is smeared on.

We then went to Phillips House (private), where Allen was doing a gall bladder. Right rectus retracting paramedian, appendicectomy. He usually removes gall bladder from fundus—apparently because he thinks it needs less traction, and there is less risk of massaging stones into the common bile duct in isolating the junction. He first injects with saline to produce artificial œdema for dissection (got this from Grey Turner). In this case the procedure certainly looked useful. The gall bladder was a sessile thin-walled one, and I am pretty sure I could not have got a decent peritoneal cuff by plain dissection. Of course, his method means picking up a good many vessels as you go down. He has a nice suction trocar with

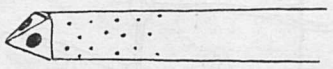

Fig. 97

which he emptied the gall bladder. There were two big stones and a host of small ones. (There was a family history of acholuric jaundice, but this man was said not to have it.) Allen came over to the left to palpate the bile duct, but concluded he need not open it.

In the talk at Montreal bile salts were advocated for symptoms after cholecystectomy, especially

where there was cholesterol mud in the common bile duct. This is dissolved by excess salts.

After this we went across to the main hospital, where Reginald Smithwick had kindly arranged to do a dorsal sympathectomy for me. Smithwick is a young general surgeon, said to be very good and certainly very keen, who has taken up neural surgery, particularly sympathetic, as an interest. Mixter (not Charles) and with him James White are the proper neuro-surgeons.

Smithwick is at present very much influenced by Finney's writings on gastric surgery, and thinks that the right operation is a radical gastrectomy with end-to-side gastro-duodenostomy (Haberer-Finney, but pretty radical). He says that with immobilisation it is not at all under tension, and that Finney has anastomosed the œsophagus to the duodenum. He says further that some work of Cannon's shows that segmental peristalsis in the duodenum is likely to prevent the stuff just pouring out of the stomach into the small intestine as it does with a polya. He is sure that the protection of Brunner's glands is needed even after wide gastrectomy, and quotes Balfour, that 44.8 per cent. of patients after a radical gastrectomy have an acidity over 70 per cent. $\frac{N}{10}$ HCL.

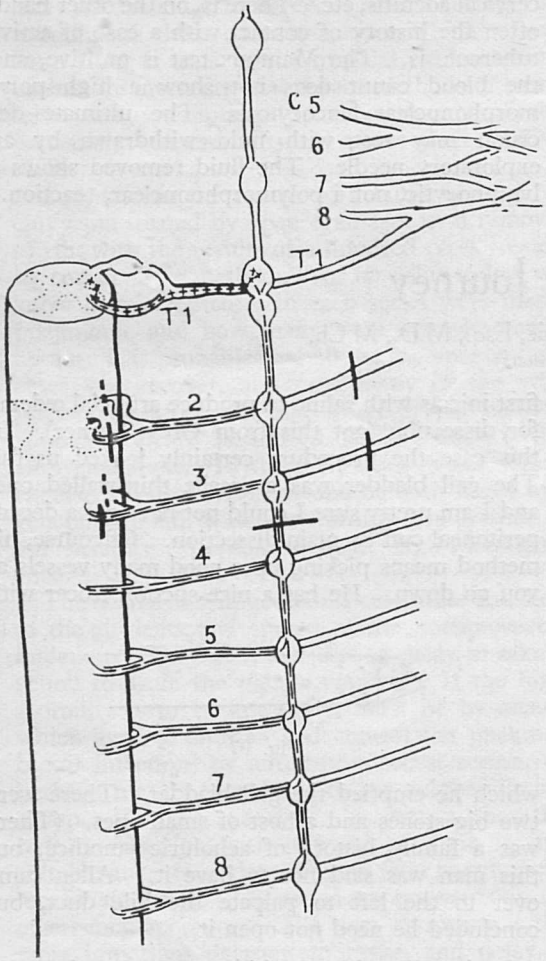

Fig. 98

He is quite certain that the temporary and inconstant results of stellate ganglionectomy for Raynaud's and other vascular conditions are not due to imperfect resection, but to the fact that resection is post- and not pre-ganglionic. Similarly the good results in the lower limb are due to the fact that the ordinary lumbar ganglionectomy is pre-ganglionic, the grey rami to the nerves L.4 and S.3 coming from 4th lumbar ganglion (which is not usually cut, and which ought not, according to our modern knowledge, to be cut) and from the sacral cord. The pre-ganglionic operation in the brachial plexus g ves equally good results.

The white ramus of D.1 (see Fig. 98) contains pre-ganglionic fibres for the pupil, but none for the arm. The arm fibres come off chiefly in the white rami from D.11 and 111, but may emerge even as far down as D.8. The pre-ganglionic fibre usually ends in the ganglion it enters, but it may run several segments in the cord before synapsing. An adequate operation, therefore, is division of the rami from D.2 and 3 and division of the cord between D.3 and 4 ganglion. Special precautions are necessary, because of the irregular number and course of rami, and of the tendency of the sympathetic to regenerate. His operation (which is his own) is resection of the 2nd and 3rd nerves from well outside the cord till well inside the theca, where they consist of two roots, and dislocation of the cut end of the sympathetic trunk.

Operation.—Girl of 20 (married) with scleroderma. She is excitable, with flushes, tremors, sweats, cold hands and feet, but no local vascular changes in affected limbs; B.M.R., 25. Scleroderma in right upper limb, lately starting also in left.

Patient face down. Closed-circuit anæsthesia, which seems the rule here. Short incision (they have to be cosmetic), 2½ inches long, vertical, 4 cm. from mid-line, centre between second and third spines. Diathermy for bleeders. Cuts trapezius in same line, 1 inch only. Splits rhomboids over 2nd rib in line of their fibres with scissors; inserts finger—verifies his ribs again. Inserts Gilpie retractors. (Scissors type of thing. They are gynæcological—I believe for holding labia apart.) Cuts fascia above and below third rib, but does not use periosteal elevalor. Pushes pleura and cleans rib with his fingers, working slowly. First below (where he

shows the 3rd nerve), then above, keeping well in towards the spine till pleura is clear. This way you never damage the pleura. Resects an

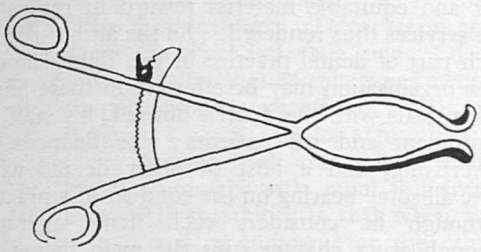

Fig. 99

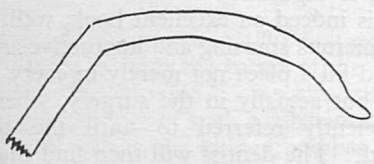

Fig. 100

inch of 3rd rib, with fingers strips pleura further off bodies, and off under side of 2nd, 3rd and 4th ribs. Nibbles away tip of 3rd transverse process and neck of 3rd rib. Says you can usually feel sympathetic trunk with fingers; at any rate, it always lies exactly in the groove between the head of the rib and the vertebral body and can be hooked up there with a blunt hook.

Follows 3rd nerve out a bit, crushes and cuts it. Then holding its cut end with forceps, he dissects it in, working with a dental spatula as blunt dissector, cutting rami, and finally getting anterior and posterior root with its ganglion quite separate. He cuts proximal to these, and therefore is quite certain he has got all rami. This business of getting roots sounds alarming—one should have to go through dura and pretty close to spinal cord, but actually he used no force, only patience, and met very little resistance in the way of dura. *Most important* to be certain, by examination and photography, that there is no cervical rib; if one was not spotted the surgeon would resect the important first dorsal, in lieu of the second. After the third nerve he resects the second in the same manner, the specimen being like this. He then

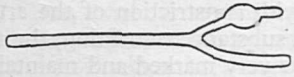

Fig. 101

brings up the sympathetic trunk with a blunt hook, clears D.3 ganglion and brings D.4 into view. He cuts the trunks between D.3 and 4, ties its upper end with silk, and sutures it with this to the erector spinæ muscles.

He closes carefully in five layers—erector spinæ, rhomboids, trapezius, fascia, subcutaneous—so that the skin sutures can come out in 48 hours, and the other side can be done in a week.

After lunch I made a round with Churchill, that I have already referred to, and so, as far as I can remember, went to bed early, as we had a country trip next day.

Thursday, November 11th

This was a bit of a holiday. Allen had a country operation—apparently rather an uncommon thing in America, as surgery always comes to the surgeon, and to his own hospital, and nursing homes are unknown. The case was a splenectomy in a boy for familial acholuric jaundice in a hospital at Bristol, Rhode Island. Rhode Island is the wealthy yachting centre, and never was surrounded by water.

We started at 7.30 along the beautiful concrete roads, averaging about 50 without ever going much over it. As we got near we ran into several Armistice Day celebrations. I think I have referred to the American Legion; this seems to include not only all who entered the army, let alone those who left the shores, but all connected with it in any way, including all the women folk.

Now there are all sorts of junior organisations, boys and girls, and young men, who have brilliant uniforms of red, white and blue, and tin hats stamped out of aluminium, and who run magnificent bands. These various bodies were marching through the streets, and a gay and tuneful spectacle it was. The sun shone, and it really was a lovely drive. We passed creeks and yacht harbours, but left them till later, only a glimpse of "Ranger" made me determine to buy a camera.

The hospital was a very nice one, as it should be in a millionaire's town. The anæsthetic, the first I have seen by any but a professional—was open ether from a little tin with a punch hole, but quite efficient. Right paramedian. Allen used some enormous long scissors angled on the flat that he said were made for craniotomy. With these he divided the outer layer of the renal ligament and brought the spleen out. He then tied the vasa brevia, and seemed to get them easier than I do, and very safely. He tied accessory vessels each end of the spleen before coming to the pedicle, and was very careful to get the tail of the pancreas away before clamping. After ligature he found another spleen and removed it. A very nice job and quite bloodless.

(*To be continued.*)

Reviews

Progressive Practice, A Treatise on Dental Economics. By EDWARD SIMSON, L.D.S., R.C.S., F.C.S. Published by Messrs. J. S. Cottrell & Co. Pp. 234. *Price* 10*s.* 6*d.*

THIS is the second edition of a book which on its first publication was well received by the dental profession, and enjoyed a reputation which it well deserved.

The progressive outlook which animates the author has led him to take the opportunity, which presented itself in the call for a second edition, to revise the original subject matter and add a considerable amount of new material.

The outstanding features of the book are the ease with which it can be read and understood; the manner in which it stimulates constructive thought, and its completeness. Dealing with every phase of dental practice, it combines in a subtle manner the ethical and material aspects. Thus it aims at producing a state of affairs in dentistry, on a par with the highest ideals of the healing art, and at the same time at producing a fair and equitable material reward in return for the services thus rendered. So the author reviews each part of dental practice in this light, showing how organisation may be effected on these lines.

He deals with the dentist himself, his staff, his equipment and his patients; his finances, his advertising, and a host of other details which have all some bearing on the conduct of a practice. Although he considers each item separately, through every chapter runs the main theme, the progress of dentistry towards the highest ideals of which it is capable.

This is indeed an excellent book, well rounded with numerous amusing and instructive anecdotes. It should fill a place not merely in every dentist's library, but actually in the surgery, where it can be frequently referred to until the theme is absorbed. The dentist will then find that he has gained an ideal for which it is worth while to strive.

The Relation of the Kidneys to Hypertension

The Substance of two Papers read before the Physical and Physiological Societies on 8th February, 1939, by R. Craig, Esq., and H. F. Lunn, Esq.

MR. CHAIRMAN and GENTLEMEN,—Richard Bright,[1] writing in the *Guy's Hospital Reports* of 1836, recorded for the first time the occurrence of cardiac hypertrophy in cases of renal disease. Amongst his series of cases were some whose cardiac enlargement was due to manifest valvular disease. For the greater proportion of the cases no such explanation could be found. "This naturally leads us," he writes, "to look for some less local cause for the unusual efforts to which the heart has been impelled, and the two most ready solutions appear to be, either that the altered quality of the blood affords irregular and unwonted stimulus to the organ immediately, or that it so affects the minute and capillary circulation as to render greater action necessary to force the blood through the distant subdivisions of the vascular system." Thus in this latter suggestion Bright is in agreement with the results of recent research, which has led to the belief that a pressor substance derived from the kidney circulates in the blood stream and causes peripheral arteriolar constriction.

Traube showed in 1856 that the true connecting link between renal disease and cardiac hypertrophy lay in a raised arterial blood pressure. Until Riva-Rocci introduced his pneumatic cuff sphygmomamometer there was no reliable method of measuring blood pressure in man, and estimations were made only by the very inaccurate digital method. This apparatus, introduced in 1896, has been in general use for about the last thirty years. Research on the problems associated with variations of blood pressure has therefore been limited to this period of time.

EXPERIMENTAL HYPERTENSION

The observation that there was such a close association between renal disease and hypertension in man led to the attempt to produce a similar sequence of changes in experimental animals. It was found that hypertension followed many types of experimental interference with the kidney. It was produced by nephrotoxic drugs such as lead, mercury and oxalates, by irradiation of the kidneys with X-rays, by constriction of the renal veins and arteries, and by mechanical obstruction to the ureters. Reduction of renal substance alone was not sufficient to cause hypertension, but when combined with constriction of the arterial supply to the renal substance remaining, the rise in blood pressure was very marked and maintained its high level for a long time. Goldblatt[2] was responsible for much of this experimental work, especially for that associated with renal ischæmia. He perfected an adjustable clamp which could be fitted on the renal arteries of experimental animals. Renal ischæmia, whether or not associated with de-

generative changes in the kidney, was found to be the most constant means of raising the arterial blood pressure.

The means by which such hypertension was produced were then investigated. A nervous mechanism was first excluded. Denervation and even transplantation of an ischæmia kidney[3] does not prevent the development of this experimental hypertension. There are no significant alterations in blood volume or viscosity, and no signs of renal insufficiency to account for the raised blood pressure in these animals with renal ischæmia. The only remaining possibility is that when the kidneys are subjected to ischæmic or the other forms of interference mentioned above, a pressor substance is liberated which circulates in the blood stream.

Tigerstedt and Bergmann in 1898 first extracted a pressor substance from the cortex of the kidney, which they called " renin." Recent work has confirmed the presence of such a substance, which is to be found only in the kidney, and has contributed further to its nature. It is a protein-like substance, thermolabile, non-dialysable, and on injection into animals gives rise to a sustained hypertension. Alone of pressor substances as yet discovered " renin " causes a hypertension identical to that found in chronic nephritis and essential hypertension, *i.e.*, in which the rate of blood flow is normal. There are recent claims that this substance is responsible for the hypertension caused by renal ischæmia. There is no evidence that such hypertension is in any way compensatory to overcome the renal ischæmia; it is suggested that the ischæmia either prevents the normal breakdown of this pressor substance " renin " with its consequent escape into the circulation or that " renin " is produced in the course of some metabolic process which is prevented by the ischæmia from reaching completion. Whether this substance " renin " is finally proved to be responsible for experimental renal hypertension, or whether further research points to some other substance, there remains the established fact that a renal pressor mechanism exists in the body and that it produces its effect by humoral rather than nervous means.

CLINICAL HYPERTENSION

In the case of man, a study of the clinical conditions in which renal disease and hypertension occur replaces the experimental method used in animals. The two diseases in which both these factors play a part are " chronic nephritis " and essential hypertension. When allowance is made for any difference in the age groups into which the patients may fall, it is found that there are many points of similarity in these two types of hypertension. In the former, the " renal " type, there is a generalised medial hypertrophy of the arteries throughout the body, with evidences of hyaline necrosis in the arterioles of certain viscera. Similar changes are noted in cases of essential hypertension. The retinal changes are likewise similar in the two conditions. The distinction between albuminuric retinitis and retinal arteriosclerosis is now recognized to be one of degree rather than of type of retinal change. In both conditions the rate of blood flow is normal in the peripheral vessels, and normal vascular reflexes are present. Section of the sympathetic nerves causes no vasodilatation.[4]

RENAL HYPERTENSION

The similarity between these two forms of hypertension has suggested that the renal pressor mechanism may underlay both of them. The hypertension of chronic nephritis is certainly comparable with the hypertension following ischæmia or other damage to the kidneys in experimental animals. In other forms of renal disease the degree or presence of hypertension depends on the distribution and extent of the disease process.

In nephrosis a rise of blood pressure is rare in spite of extensive renal damage—perhaps because of the poor general condition of the patient. In focal and embolic nephritis, although abnormal constituents are present in the urine, not enough renal tissue is involved to give rise to hypertension. In cases of polycystic kidneys, hydronephrosis, advanced pyelonephritis and periarteritis nodosa of the renal vessels, a high blood pressure is recorded. Similarly hypertension results from prolonged toxic action of lead or mercury on the kidney. These instances of damage to the renal parenchyma may be compared to that produced by experimental measures with the resulting rise of blood pressure. It is uncertain whether the same comparison can be made with regard to acute glomerulo-nephritis, as there is considerable evidence that this condition is not primarily a renal one, but is a generalised capillary disease.

Contrary to general belief, there is no evidence that the hypertension of renal origin is in any way compensatory and occurs in order to force a large volume of blood through the few functioning units or nephrons which remain. Page[5] has asserted that renal efficiency is in no way diminished, but is rather improved when the blood pressure is lowered by therapeutic measures in cases of chronic nephritis. This is what would be expected if some such pressor substance as " renin " was being liberated from the nephritic kidney as suggested above.

ESSENTIAL HYPERTENSION

Clifford Albutt was responsible for the conception of an hypertensive state separate from that of Bright's disease. In 1915 he described the clinical condition he termed " hyperpiesia " and defined it as a state in which the dominating feature was a permanently raised blood pressure, associated with left ventricular hypertrophy, terminating in heart failure or cerebral hæmorrhage, and showing little or no renal insufficiency. This is the condition now known as essential hypertension, and the points of similarity with relation to " renal " hypertension have already been described. The hyaline necrosis of the arterioles is, however, more marked in this condition, and although it is often found in other viscera, it always occurs in the interlobular arteries of the kidneys to a varying extent. The media of these arteries and of the afferent glomerular arterioles is swollen and fibrous, the intima proliferates and overlies a layer of hyaline material. In this way the blood supply to a varying number of glomeruli and tubules is almost completely occluded.

Approximately 10 per cent. of the cases of essential hypertension take an acute and fulminating course. There is an extreme rise of blood pressure for a few weeks or months and death ensues from acute renal insufficiency. Such a condition is often termed malignant hypertension. The kidney, on section, shows advanced changes of essential hypertension. The afferent glomerular arterioles are not only swollen and hyalinised, but also necrotic and containing intravascular thrombi. The glomeruli and tubules show an adavnced stage of degeneration.

Originally, the invariable occurrence of renal degenerative changes in these two clinical conditions led to the belief that the kidney was the primary seat of the disease. It is now held, however, that these changes are secondary to the raised arterial pressure. Similar histological appearances to the kidney of malignant hypertension are found in other instances of a severe degree of hypertension. They occur in the kidney in cases of basophil adenoma of the pituitary,[6] and are comparable to those produced in experimental animals.[7] The invariable occurrence of renal vascular degeneration can be understood after a consideration of the anatomical position of these vessels. They are in very close relation to the abdominal aorta, and under normal conditions are probably subjected to a pressure which is higher than that in any other arterioles in the body. These renal arterioles will therefore be the first to be affected by any rise in systemic blood pressure.

If a raised arterial blood pressure is the primary cause of the changes found in essential hypertension, there remains the problem of discovering its cause. Metabolic atheroma alone will not suffice, as it frequently occurs in diabetic subjects with no hypertension. Hyperactivity of the sympathetic nervous system is a possible cause. There is no evidence, however, of nervous spasm of peripheral vessels, because sympathectomy in essential hypertension causes no arterial dilatation in the limb concerned. Constriction of the vessels of the splanchnic area might cause a raised blood pressure, which would be accentuated by any constriction of the renal vessels. Operative removal of the abdominal and lower thoracic sympathetic chain may produce a cure of essential hypertension if the operation is performed very early in the disease.[8] At a more advanced stage temporary relief only is afforded by such measures.

Essential hypertension may be due to a pressor substance in the blood stream. This theory is not excluded by the observation that transfusion of blood from a hypertensive donor causes no rise in blood pressure in the recipient. The pressor substance may be adsorbed on to the vessel walls or may be present in such small quantities that further dilution renders it inactive. Cushing claims to have discovered proliferation of the basophil cells of the posterior lobe of the pituitary in cases of essential hypertension, but his finding has been disputed by others.

The similarities between the type of hypertension found in chronic nephritis and essential hypertension have suggested that the renal pressor substance is responsible in each case for the maintained rise of blood pressure. In essential hypertension, however, there is no initial renal disease to cause the liberation of this substance into the blood stream. The conception of a " vicious circle " has, therefore, been evolved as a possible explanation of the cause of essential hypertension. The initial disturbance may be repeated transient attacks of hypertension due either to overactivity of the sympathetic system or to an excessive secretion of the posterior lobe of the pituitary. This intermittent hypertension causes early hyaline necrosis of the renal arterioles. The renal ischæmia thus produced causes the liberation of the renal pressor substance. This further accentuates the hypertension, which leads to extension of the arteriolar necrosis in the kidneys. Thus a vicious circle is established, which progresses slowly in essential hypertension and rapidly in the malignant form.

If such a hypothesis is true, it indicates that the condition must be treated early and intensively before the renal condition is irreversible. Any means of lowering the blood pressure—therapeutic

or operative—will break the vicious circle and thus give the body a chance of restoring its equilibrium.

SUMMARY

It is probable, therefore, that the renal pressor mechanism which has been studied extensively in experimental animals is the primary cause of the hypertension associated with renal disease. It is probably a secondary but necessary factor in the production of essential and malignant hypertension. There is evidence that the renal pressor substance "renin" is responsible for these various forms of hypertension.

REFERENCES

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2. Goldblatt *et al.* *Journ. Exp. Med.*, lix, 347, 1934.
3. Fasciolo, Houssay and Taguini. *J. Phys.*, xciv, 281, 1938.
4. Pickering. *Brit. Med. Journ.*, Jan. 7th, 1939.
5. Page. *Journ. Clin. Gnv.*, 13, 909, 1934.
6. McMahon, Close and Hass. *Am. Journ. Path.*, x, ii, 1934.
7. Wilson and Byrom. *Lancet*, Jan. 21st, 1939.
8. Allen and Adson. *Am. Ht. Journ.*, xiv, 415, 1937.

General References

"Hypertension and Nephritis." Fishberg.
"Recent Advances in Pathology." Hadfield and Garrod. Third edition.
Leading Article, *Brit. Med. Journ.*, Oct. 29th, 1938.
"Arteriosclerosis." Albutt.

Correspondence

Guy's '89 Club

To the Editor of the GAZETTE

SIR,—The above Club will hold the 43rd Dinner at the Trocadero Restaurant on Wednesday, 10th May.

Will all members please send me a postcard so that I can make the necessary arrangements.

Yours, etc.,
GERALD S. HOVENDEN.

Glebeholme,
99, Church Road,
Barnes, S.W.33.

The Annual Dental Clinical Meeting

To the Editor of the GAZETTE

SIR,—The Dental School is this year celebrating its Jubilee. The Annual Clinical Meeting was held in the Dental Department on Saturday, March 4th, and it was attended by many Guy's men, both past and present.

The most modern techniques in dental surgery were demonstrated by members of the dental staff and a very keen interest was shown by all those present.

All the departments of the Dental School were hives of industry. In each of these different departments were being demonstrated and discussed the methods of treatment of cases of particular interest. Extractions were performed under local and general anæsthesia, and more difficult operations of dental interest were carried out in the theatres.

In the Denture Room, Professor Fenn and his demonstrators showed prosthetic cases, impression techniques and the importance of balanced occlusion.

In the Dental Research Laboratory, Mr. G. B. Pritchard was in charge of the histological section, and Mr. M. A. Rushton, whose research work on the "Calcification of the Dental Tissues" was of particular interest, showed pathological specimens.

In the Conservation Room were being demonstrated the different methods used in conservative dentistry.

Professor W. E. Herbert performed some root resections which were a delight to watch.

Mr. F. S. Warner and Mr. A. R. F. Thompson showed cases of "Paraodontal Disease" and their treatment.

The demonstrators in the Conservation Room showed cavity preparations and the different techniques they adopted with the filling materials used.

In the Children's Department Mr. R. E. Rix and Mr. F. Bocquet-Bull showed Orthodontic cases in the process of treatment. Mr. H. Richards demonstrated different orthodontic treatments with some large-scale models he had made. Mr. K. E. Pringle showed many cases of "Collapse of the Bite."

We left the Clinical Meeting, donned our glad-rags, and repaired to Grosvenor House, Park Lane, to attend the Fortieth Annual Dinner of the Dental Society.

There were nearly four hundred Guy's men present, and Professor H. R. B. Fenn, our President, was in the Chair. An admirable evening's entertainment was provided.

The toast of the Guy's Hospital and Schools was proposed by Mr. H. H. Lett, President of the Royal College of Surgeons, whom we were very honoured to have with us. Mr. E. B. Dowsett responded to this toast.

Mr. F. Bocquet-Bull proposed the toast of the Visitors; he especially welcomed student representatives from other dental schools, including those of Edinburgh and Glasgow, and suggested that if these Scottish cities could send representa-

tives to London, then surely the Dental Dinner could be made an international gathering, and representatives from Paris invited for next year. Surgeon-Capt. E. E. Fletcher, of the Royal Navy, responded to this toast.

Mr. Arthur Bulleid proposed the toast of the President, and said that Professor Fenn was the first non-Guy's man to be made President of the Dental Society. This demonstrates, continued Mr. Bulleid, how highly Professor Fenn is admired among the dental students.

Professor Fenn replied by thanking Mr. Bulleid for his kind remarks and thanked all those present for making the Dental Dinner such a tremendous success. In closing, Professor Fenn referred to the excellent work which Mr. Titford, the secretary, had done for the Dental Society, and thanked him accordingly. Mr. Titford replied by thanking Professor Fenn for what he had said, and added that he was very gratified by the way in which Guy's men had supported him in attending the Dinner.

Yours, etc.,
J. C. RITCHIE,

Guy's Hospital,
S.E.1.

Hospital Information, etc.

Notices

Cross-Country

We congratulate Mr. A. E. T. Etheridge for running sixth in the National Cross-Country Championship on Saturday, March 11th, and on being chosen to run for England in the International at Ely Racecourse on April 1st. This is the first time a Guy's man has been chosen to represent England across country. He has also beaten Dr. Munro's record by winning the Inter-Hospital Kent-Hughes Cup six years in succession.

MANNEQUIN BALL

A Dinner and Dance will be held at Grosvenor House on Friday, March 31st, 1939. The proceeds will be devoted to endowing a bed in Guy's Hospital.

Tickets, 21*s.* each, may be obtained from the Secretary, British Mannequin and Photographic Models Association, 8, Brook Street, Hanover Square, W.1.

Erratum

GUY'S *v.* ROYAL AIR FORCE

In our report of the above "Rugger" match, the seventh and eighth lines of the fourth paragraph should have read: "week, are unlikely to appear in the side again this season."

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND.
F.R.C.S.
FINAL EXAMINATION.

G. O. Jelly
B. W. Smith
M. Tree

Papers by Guy's Men

Sir Arthur Hurst. Cancer of the alimentary tract. *Lancet*, 1939, i, 553, 621.

A. Lisle Punch. Bronchiectasis. *Post-Grad. Med. J.*, 1939, xv, 88.

E. Biddle and Another. Transfusion with conserved blood. *Brit. Med. J.*, 1939, i, 555.

Guy's Hospital Reports.
1938, lxxxviii (Ser. 4, xviii), No. 4, October.
Contents.

Brock, R. C., and Cann, R. J.: Experiences with the use of intra-bronchial radon in the treatment of bronchial carcinoma. Pp. 371-391.

Cann, R. J.: Basal-celled carcinoma of the trachea. Pp. 392-402.

Thompson, A. Ralph: The nature of badly functioning kidneys and their relation to the urogenital column of cellular tissue. Pp. 403-417.

—— Some aspects of cancer of the prostate. Pp. 418-421.

Lintott, G. A. M.: Some observations on the clinical value of gastroscopy. Pp. 422-431.

Spalding, J. E.: The fascial spaces of the palm, a contribution to their surgical anatomy. Pp. 432-439.

—— Pneumoperitoneum. Pp. 440-445.

Thomson, L. C.: Polyarticular osteoarthritis in a young man, associated with chondro-osseous dystrophy. Pp. 446-455.

Pantin, C. G.: A study of the relation between nephritis and nephrosis. Pp. 456-481.

Bowen, W. H.: Suppuration in the hip joint. Pp. 482-489.

Forbes, J. R.: Repeated tuberculin tests. Pp. 490-497.

Changes of Address

J. R. Forbes, M.D., M.R.C.P., 41*a*, Marlborough Place, St. John's Wood, N.W.8. *Maida Vale* 7178.

Births

HALLAM.—On March 14th, 1939, at Lansdowne Nursing Home, Blundellsands, to Marny (née Weaver) and John Wemyss Hallam, M.R.C.S., L.R.C.P., L.D.S. Eng.—a daughter.

Marriages

FORBES—MOORE-BROWNE.—On Saturday, February 18th, 1939, at Holy Trinity, St. Marylebone, John Forbes, M.D., of 51*b*, Trinity Square, S.E.1, to Patricia Moore-Browne, of 6, Camden Square, N.W.1.

Deaths

COLLIS.—On March 8th, 1939, at Clent, near Stourbridge, Arthur John Collis, M.D., D.P.H., Colonel (T.F.), in his 70th year.

EDS. { C.H.E.
W.D.B.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *8th April* 1939 — *Number* 1323

PASSIM

THE preparation of medical services for what is still euphemistically called a National Emergency has been developed steadily since the crisis last September. The scheme, published recently in the medical press, whereby London is divided into sectors, each centred on one of the great teaching hospitals, and feeding a series of base and advanced base hospitals in the contiguous countryside, is well known to most medical men, whether working in London or not. The teaching hospital is to be as far as possible a casualty clearing station, where cases are classified according to their injuries and emergency treatment only is instituted, before their transport to the base. The number of occupied beds in all the London hospitals is to be rigorously cut down, in proportion to the full complement of each. Thus it is hoped that Guy's will not contain much more than 200 in-patients at any one time. This latter plan is especially wecome at Guy's, since it has been known for some time that Guy's House—that is the Surgical Block—is built on aged and insecure foundations, and recently expert opinion has been given that it is too dangerous in war conditions to be habitable.

The whole activity of the Hospital then will be concentrated in the Medical Block and the Out-Patients' Building. Ambulances will drive through the War Memorial Gate and unload at the door leading from the corner of the Park next to Nuffield House to the main Out-Patient Hall. Walking and stretcher cases will be admitted at the main Out-Patient Entrance in the Maze Pond.

In the main Out-Patient Hall the cases will be classified as far as possible into three groups. First, those for immediate evacuation as soon as conditions overhead permit and transport is available; secondly, those who require resuscitation before operation or transport; and, thirdly, those who require operation before evacuation. The six wards in the lower three floors of the Medical Block will be occupied by male and female patients of each of these three categories.

Since, almost without exception, the operating theatres of every hospital in London have glass roofs and usually are at the top of the building, and so are of no value in time of war, theatres have had to be built in basements. At Guy's, a fairly large floor space in the basement of the Out-Patient Building immediately beneath the Ear, Nose and Throat Department is being fitted out at this moment as emergency operating theatres.

In proportion as the number of in-patients in the Hospital is to be diminished, so is the number of the medical staff. The services of every qualified man, nurse and clinical student are, however, required for work within the sector. The majority will be posted at the base and advanced base hospitals, but will serve their turn by rota for duty on the skeleton staff which is running Guy's itself. Nuffield House will, of course, be evacuated of its patients, along with all the normal cases in the Hospital that can possibly be moved, and will be an asylum for those of the staff still working in the Hospital. No doubt the members of the staff will inhabit it in such a way that their vertical distance from the roof is in direct ratio to their professional standing, but, even so, its luxuries will be welcomed by the normal denizens of the College.

At the outbreak of war, all teaching will cease.

Thus the normal occupation of all the students attached to the Hospital will for the time being come to an end. It is likely that all the pre-clinical students will be required to serve their country in non-medical capacities, along with all other healthy male adults, but it is hoped that all students in the clinical period will remain attached to the Hospital as dressers until teaching is resumed. It is clear that they will have clinical experience of the utmost value, and in the stress of emergencies will have opportunities of using initiative and bearing responsibilities such as cannot occur in normal conditions. It was implied in a recent speech by the Minister for Health that all whole-time workers in hospitals during a state of war will draw pay and qualify for pensions on a scale similar to that of the medical branches of the armed forces. It is probable, too, that uniform of some kind will be worn, for the reason that is at the back of most conventions of uniform —the better maintenance of discipline.

Guy's, then, if war occurs, will be an organised first-aid station where the treatment will be mostly that of shock, hæmorrhage and trauma. For the first, warmth, fluids and morphia will be required ; for the second a well-organised blood transfusion service, based on the use of pooled blood of Group IV donors to be stored and administered by methods for which the medical service of Barcelona has been largely responsible. Physical trauma will be treated according to the ordinary rules of emergency surgery, into which the treatment of shock and hæmorrhage of course merge. Lastly, mental trauma, the frequency of which is not to be under-estimated, will need to be vigorously and immediately dealt with. It is mainly to Sir Arthur Hurst's teaching, derived from his experience of shell-shock during the Great War, that we owe our acceptance of the two axioms that in war-time hysteria does not co-exist with physical injury, and that immediate skilled treatment produces complete cure in almost every case, whereas if even a few hours are allowed to elapse the functional defect is far more difficult to eradicate.

Let no one suppose that to be in a state of readiness for war implies a conviction of its inevitability. A state of mind of surly resignation in the community is the surest way to bring it about. We foresee it as a possibility and face it with a sense of reality. We are ready to extract from it what we can of humour; but our professional education, no less in its ethical than in its scientific training, enables us to see more clearly than most people the inherent evil and uselessness of war. Arguable though it is, we must put faith in the old principle of which so many examples may be quoted for or against : *Si pacem vis, pare bellum.*

THE status of the Surgical Take-In Ward Clerk deserves comment. For at least one week during his appointment he combines the function of student, porter, waiter and chef. Without doubt he gets advantages by so doing. He receives his first close experience of emergency surgery. He opens his first abscess. He gets to know the other members of the take-in firm better than he would do otherwise. But for those advantages he suffers and works hard. During take-in week he has more clerking than at any other time during his appointment. He has more patients to be seen, written up, and conveyed to and from the theatres. Yet he must lose his night's sleep to convey patients from the Surgery to the wards. For the Hospital does not provide porters during the night. And he must doff his dignity and wait on dressers and house officers at tea and supper. For it is a tradition in the Hospital so to do.

The Take-In Ward Clerk has no status in the Hospital. He is not a recognised part of the Hospital organisation. No special rooms are set aside for him in the College. No food is provided for him by the Hospital. He must pay for his mixture of learning and service. It costs him something over £2 to buy a week's food and a dingy bedroom in the College. It costs him another 30*s*. rent for his digs while he is away from them. The wages of two night porters would amount to about £5 10*s*. a week ; the Take-In Ward Clerk helps to save the Hospital that sum of money.

Whether the take-in firm has any right to turn its ward clerks into cook-generals is a very debatable point. It is nice for everyone but the ward clerks and the dressers who pay to have a high tea and a late supper in the Dressers' Room.

For his services to the take-in firm and the Hospital the Take-In Ward Clerk deserves some return. Might not the Hospital provide him with free rooms in College and even, possibly, free food ?

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

An Appreciation

THE LATE MR. GOLDING-BIRD

By Dr. H. M. Berncastle

AS an old dresser to Mr. Golding-Bird in 1898 I should like to add a few words to your appreciation of him with a few reminiscences. He was a most genial man, and what struck me as an embryo was his dexterity and celerity with the minimum amount of apparatus when operating. I only once saw him rattled; as he was the junior full surgeon we seldom got into the one and only theatre, most of our operating was done behind screens round the bend in Lazarus and Dorcas. One afternoon he had finished two operations when he said, " Now I will do the cleft palate." The house surgeon, very perturbed, said he had not got it ready. G.-B. got quite testy and fired off quite a lot.

The house surgeon sent me post haste to Coles in the theatre to get the instruments. Now Coles, who was O.C. Instruments, was a very autocratic person. " It ain't on the list," he said, when I asked him. I was insistent, so he leisurely sterilised the necessary things and it was about twenty minutes before I got back to Lazarus. There I found everybody clearing up and G.-B. putting his coat on—he had done the operation with a few forceps and needles from the tray of the previous job and made a perfect operation with a perfect result.

G.-B. was very fond of what the Moderns call a " wisecrack." Here is one. The firm meeting him in the Colonnade, the house surgeon gave him a letter. On reading it he was immensely amused and said: " Listen to this. A doctor, evidently from the North, wrote about a case: 'I made an incision and let the *puss* out.'" G.-B. roared, " He's let the cat out of the bag!" We heard a lot about letting pussy out of the bag for a bit.

He was very fond of using dog-Latin tags which mainly came down to " incisio and amputatio "; even the most beery citizens of the Borough used to sit up and take notice when they heard them. A little mannerism of his was to throw the last instrument he had used scuttering into the dish or on to the floor; when he had finished with a wooden mallet he used to throw it up in the air—we soon got wise to this and used to spread out to make a mark.

X-rays were just beginning to be talked about, and surely the two fellow-students who worked in a dug-out splint cubby hole under the steps from the Colonnade were the pioneers at Guy's. We had a small boy with a bullet in his arm, so we all trooped down to see it. X-rays were only flicks in those days. G.-B. said: " Gentlemen, we have seen a lot of sparks but no bullets; take him upstairs." He had the bullet out inside of five minutes.

Another habit of his—not to appear to know his dressers' names and call some of them at least by some other name. I was full dresser three months, with an extension of three months, and during all that time I was always Bernhardt or Bernard. I said to him towards the end of the time, " My name is So-and-so." " Ah," he said, " and very good wine, too." I did not quite know whether to take it as a compliment or not.

The last time I saw him was when in early 1899 I was up for Final Conjoint Surgery. I was directed, with trembly knees, to go to a table. To my joy I saw G.-B. there. He knew me, and at once said: " Something wrong; this man is a Guy's man." An official was called, and it was G.-B. who was wrong—he was at the wrong table. I'll bet he never made many mistakes like that. The co-examiner was an ominous-looking person who proceeded to grill me well and truly. I learnt afterwards that he was author of the then students' surgical bible, " Walsham's Surgery." He was reckoned to be tough, but as I passed I must have covered up my deficiencies.

I see I had an association with his 100-years' link with Guy's. My father qualified from Guy's in 1842; Golding-Bird's father was Assistant Physician then. This makes out that I ought to be around ninety, but I am not; I was only five years old when G.-B. first qualified. However, nobody goes on for ever, but I am glad that I was dresser to Golding-Bird in the Gay 'Nineties.

Notice

LECTURE

On Tuesday, May 9th, at 5 p.m., a Lecture will be given in the Anatomical Theatre by Dr. W. Randolph Lovelace, of the Mayo Clinic. His subject will be: " The Use of High Concentrations of Oxygen, and of Helium and Oxygen Mixtures." All students are invited to attend.

The Management of Fear

ILLUSTRATED BY DISEASES OF THE NOSE, THROAT AND EAR

A Clinical Lecture delivered at Guy's Hospital by T. B. Layton, D.S.O., M.S.

GENTLEMEN,—The management of fear is, I believe, the most important of every doctors' duties. We have to allay fear and we have to prevent it arising. Fear may come to the patient, to those around him, and to ourselves. Fear may merge into terror or be no more than apprehension. I do not think in the adult that, clinically, we often see a patient in a state of terror; and we may not recognise it when we do, for in fear terror is raised to a degree that the actions of the individual are difficult of interpretation by the onlooker. I remember one such case. It was when I was a house-surgeon, late at night, and all the firm had gone to bed. A man came into the old Front Surgery—where the Surgical X-Ray Room now is—with a boil in his neck. To save the assistant house surgeon from being aroused I treated him and gave him his instructions for attendance next day. His behaviour then became strange; waving his arms about he talked excitedly and disjointedly. I found that he worked in the fur trade and thought that this was anthrax. When I assured him it was not, he turned away from me towards the wooden partition that separated from the main room that small area where we did the minor dressings. He raised his arms and tapped on this partition, and then, turning his head towards me, ran his finger along the wood as though he were writing on the wall. I had almost to drive him away. It was not until I was on my way to the College that I realised that this man was in a state of terror. His stammerings, his tappings, and his writing were an attempt to interpret to me the warning notice about anthrax that was posted at his place of occupation. I went back, but he was gone, and I never saw him again. I have often wondered whether that really was anthrax. To-day I should not be so certain of my negative diagnosis of the physical condition, but I think I should recognise the mental state and admit him to the hospital for that.

In the clinical medicine of every-day life fear is at the bottom of every emergency. The criterion of an emergency is not the physical condition of the patient, but the fear in his mind or in the minds of those around him. It may have arisen in the one or in the others, but, having arisen, it is transmitted and until it is allayed it stalks through the house, preventing sleep, increasing pain and tiring out the patient and relatives alike. It is well known that in the great majority of cases in which the doctor is called out late at night there is no physical need for his attendance; but do not believe that no good is done by his going. His presence allays the fear and enables patient and attendants to settle down. Perhaps that is why indignation is so great when the doctor does not come or when they cannot find him. As fear increases, it turns to hate, which is followed by revenge. I think this is behind most of the complaints that are made against doctors for failing to answer to a night call.

When a serious condition is present involving actual or potential danger to life and needing immediate action, fear in the patient and in the relatives is an important problem. In the patient it is more easy to deal with. I say this advisedly, although the doctor has the less to do with it. The mother, the relative, or the nurse is the constant attendant that deals with the patient at this stage, who sees and soothes the fears of the individual. The doctor comes in but for a minute or so from time to time. And yet I think I am right that in an emergency, where there is no serious disease, it is the patient's fears that need allaying, and that where serious disease is present it is the fears of relatives and friends that need the most attention. Perhaps the pain, the fever, or the other symptoms of the disorder dull the mind, deaden the brain, or lower the activity of the fear centres. Probably the patient faces the fear and exorcises it.

We may divide those affected by fear into those who control it and those that give way to it. Two cases in my experience may illustrate this. One was a child at a fever hospital a few years ago, with mastoiditis and septicæmia. It was one of those cases of which one may be proud to have pulled through, and yet must know he never could have done it had not some other influence been present. There was an heroic little mother. We operated on the child three times at forty-eight hours' interval. On each occasion that we asked permission she gave it us with full confidence, without a tear in her eye, looking straight at us and almost with a smile upon her face. It gave one confidence in oneself, it enabled one's judgment to be at its best, and so it saved the child's life. It was the same when she went to see the child, always with a firm step, and with a smile as she approached her; there was no flurry, no excitement, no asking of alarming questions, but just an air of confidence as she sat down by her

little one. She showed that stupendous power of self-control in which the Anglo-Saxon race seems at times to surpass all others. But remember that the individual—and perhaps the race—pays for that self-control. I shall have to tell you more about that another time.

The other scene is in Whitechapel—just by that of the Sidney Street siege—a small shop full of people who gaze at the doctor and the specialist as they pass by; upstairs, a bedroom well furnished, with even a suggestion of luxury. A weeping girl, aged about sixteen, lay in pain upon the bed. Beside it sat a weeping mother. I examined her as carefully as I could, but any judgment was impaired by their disturbance. I came to the conclusion that she had a mastoid, and as it was in the period in which I thought that these should all be opened on the same night I advised her admission into Guy's. This was reported to the assembled family downstairs, and all at once began to wring their hands, to moan, and to implore me to save the patient's life.

The effects of fear will spread like wild-fire, or the influenza, through a community, small or large. To restore control in an individual is to begin to gain it with all. On an occasion such as this nothing can be done until you have infused some control upon one member at least of the small community, and you want to watch and see upon whom you can thus begin.

I have never been sure that that mastoid operation was necessary, but the family are convinced that I saved the girl's life. I have twice again been down to the same scene with younger members of the family, but have not again diagnosed mastoiditis. I worked hard over that case, but have now so got their confidence that I can do anything with them. The girl is married—alas! childless. She brings me one or two friends a year. I have seen all her nephews and her nieces, and when her husband had a quinsy I not only had to go down to see him, but also had to take him into a nursing home and to put off a week-end visit to look after him. Once you have got the confidence of such people your task is easy, but you must give up time to it. I find also that you must be dogmatic with them; they are not in a state to listen to the pros and cons in the way the person under severe self-control will be. I believe, also, that, having given way to their emotions at the time, they absolve themselves from the subsequent effects to which the others may be liable. Perhaps when the whole family share the fears the final result on any individual is less.

It is, however, not often that you will come across a family such as this. More usually there are two persons concerned, a father and a mother, a husband and a daughter, or any other permutation of the family circle. One or both may then give way. When both do so there may be an efficient third person present, a maiden aunt, the lady from next door, or a hired nurse. While you will use her you must not let her take complete control. Such women are rather inclined to do so, saying, "Leave it to me; you go and sit down and don't worry." You never stopped a mother's anxiety by telling her not to worry. It is occupation that they need, occupation which they can feel has some bearing upon the preparations being made. It is cruelty to parents and especially to mothers to push them out of the way when an emergency connected with their children arises. After the first emotional shock there will always be some return of mental control; it is your business to build on this and to enable the parents to take some responsibility for the preparations being made. To face fear is to prevent it for the future; to give way to it is to make it more the master at the next time. The help of the efficient female from outside is of the utmost value in times of family stress, but to allow her to take complete control is not only cruel but is bad medicine; it makes things more difficult in any future crisis, it may even have a bad mental effect upon the patient in this one. Because I have said that the patient shows less fear than those around him does not mean that he has none. To push aside the parent or near relative is to make these fears worse. I have already told you of the power for good that the mother with control will have, but the mother devoid of control may be better than the mother in another room. A child may even try to comfort her and thereby be the better for it. It is the same with husband and wife. Unless her presence clearly upsets him, she has a right to be by his side.

I return to the heroic little mother. I do not think she has ever got over that experience. No doubt I have spoilt her, seeing her out of turn and introducing her to succeeding firms as the mother that saved her child's life. The child has always clung to her, apprehensive of examination and apparently tender over the scar. A few weeks ago they came up again. I did not think there was anything the matter, but this time I was wrong; a fresh infection had passed up the Eustachian tube and there developed an abscess beneath the scar. Next week I was away, and the mother was most indignant at not being seen at once; her fears had all returned, and she thought again that everything had to give way to her. A mother's fear is the most ruthless agent in the world. My substitute was quite right in refusing to see her out of turn, and she swept out of Out-Patients and took the child somewhere else. She then wrote

me an indignant letter criticising the doctors in every department and Guy's. To this I replied firmly but kindly asking her to come and see me again. It is interesting to note that on this occasion she brought up with her for the first time her sister as a companion. Poor little soul! she realised that she had acted foolishly. A snick had been made, the pus let out, the child was well. Perhaps she thought I was going to blow her up. Last time the child came to see me was with her grandpa, and, again it was interesting to note, her behaviour to me was different than ever it had been before when with her mother. She came towards me instead of shrinking away, and all the tenderness was gone.

After an acute illness such as mastoiditis fear may remain in its lesser form of apprehension. This is seen in an apparent persistent tenderness over and around the scar. This is cured by domestic technique and a little firmness, and I think it important to do so early. Otherwise the patient may leave the area unwashed for years, by which time the scar may be permanently tender and fear of recurrence a haunting permanency. It is, however, not only fear of recurrence from which these patients suffer; there is also fear of mastoiditis on the other side, and if an otitis media occur an apparent tenderness may misguide one in decision. Allied to this is the patient in whose family a serious mastoiditis has already occurred. I have told you of the family to which I was called three times for various members; but, clinically, you do not always know of the former case. If, when examining the mastoid region, something peculiar in the behaviour of the patient elicits, in reply to a question, the fact that some other member of the family has sufiered from mastoiditis, you are entitled to write down the symptoms considerably; but remember that it is in such a case that you may make a mistake the other way if you treat them too lightly. To quote the opinion often given by a first-rate physician of to-day: "You must watch that case carefully and treat it upon general lines."

I turn from acute to other disease. In the first place comes the fear of cancer. I think that this should be considered in all public utterances upon the subject, especially those in which stress is laid upon the earliest symptoms in each part of the body. I know whenever any famous member of our profession has spoken in this way that I have had one or more cases of cancerophobia come to see me. The treatment consists in a thorough and careful examination of the part, which must be carried out without any suspicion of hurry, and then the assurance that there is no cancer. The important thing is that you must believe this yourself. If you do not there will be a something in your voice that will not carry conviction, and the patient will not be convinced and therefore not cured.

Clinically there are three groups of cases. There is the perfectly normal person who has "got an idea into his head." Perhaps from reading an advertisement, perhaps from hearing the statements of a distinguished surgeon. If you get the idea out of his head it is not likely to come back again. Then there is the individual, still perfectly normal, who has had a relative dying of cancer over a long and trying period. These periods are especially terrible with malignant disease of the upper respiratory tract, and it is not to be wondered at that when all is over the relative who has been nearest to the patient applies to himself thoughts that the illness has brought into view. This is especially so when the relative has also been the nurse, as in the case of a daughter or a wife. The treatment of these cases is usually easy and successful. The great thing is not to hurry. You have no more right to start on a consultation such as this with a train to catch than you have to start upon a major operation. Let the patient tell you the experiences she has been through, let her ask questions of you, get her to listen to what you have to say, and say it yourself. It is not the type of consultation where the letter to the doctor is important; it is the conversation with the patient that effects the cure. Fortunately for my patients, I do not believe in cancer being infective, nor in any hereditary character, nor in cancer houses; and I would advise you not to develop preconceived ideas upon these or similar hypotheses.

The third group of cases are those in which there is some essential instability. They are difficult to deal with, and one is likely to fail at the single consultation. They range from the patient who tells you of another symptom just as you have completed your examination to the one who blatantly disbelieves you. The psychologist or psychiatrist may be able to help these patients; a multiplication of investigations will not.

You must not imagine that the three groups are as distinct as I have described them. They merge one into the other, and it is your business to see that you do not tip one of the first or second groups over into the third, and there is nothing more likely to do this than excessive investigation. Everyone does not hold this view. There are those who hold that to tip over a large number of persons into a state of chronic mental instability is nothing compared with the seriousness of missing a single case of cancer at its earliest moment. In the upper respiratory tract malignant disease can be excluded with the ordinary equipment of the consulting room. Any further investigation is

likely to increase a cancerophobia, not to cure it. Further investigations may be needed in order to enable you to speak with certainty; there is no magic in them, and as a method of faith-healing they are worse than useless. They tend to leave a fatalism behind them that is bad. If there is a little tickle or ache in the throat, and you confidently tell the patient after a careful visual examination that there is nothing serious, it is very likely that the ache or tickle will pass. If you go on chasing it with endoscopies, examinations of the sinuses, and radiography of the teeth and spine, you will probably make it permanent; and if it is the basis of a cancerophobia you will probably confirm it. If you do not do this, you will leave in the patient's mind an idea that he is suffering from some abstruse, and therefore grave, lesion of which "the doctors cannot find the cause." There is much bad doctoring in the medicine of to-day, and much manufacture of mental disease by unnecessary investigations.

Malignant disease of the upper alimento-respiratory tract affords an example that is unusual in medicine in that a confident negative diagnosis is usually easier to give than a positive one. Occasionally an anæsthetic may be needed to palpate a something in the naso-pharynx, or a direct endoscopy to look into the depths of a sinus pyriformis, but both these will usually confirm a positive suspicion, and should be unnecessary to diagnose a normal mucous membrane. Examinations of the blood or chest to exclude syphilis or tubercle are only needed when a lesion has been discovered, not to decide whether there is a lesion at all.

The fears about which I have told you have all been variants of the Fear of Death. Fears for the act of living are just as serious, probably more numerous, and perhaps are often missed. Some unknown fear may underlie the most trivial complaint, may exaggerate the symptoms, may cause the patient to hide them, may prevent recovery, or may hamper you in your treatment. I find myself unable to think of all its varying influences, or to classify them in any clinical groups. I can but give you some examples that have come my way and ask you to think upon the subject and to observe. I will take deafness as my text. The great anxiety must always be the fear of losing the wage-earning capacity, or the fear of never attaining it. The city man well up in the financial world: his expenses are great, his children are still at school or college. In a few years he will attain the highest post, and be able to continue as he is living for the rest of his life. He begins to go deaf. If this progresses, he will not reach that post. He can sell his house and move into a smaller one, change his mode of living and still be in comfort in his old age; but he has got to decide, and to decide soon. A little woman, realising at thirty that she is getting on, but that there are another forty years before her before she gets an old age pension: she is a milliner, which is one of the few jobs at which a deaf woman can work, but the forewoman was unsympathetic and she has lost it. She finds herself unable to get any other, except domestic work, and that only in the form of hard drudgery, such as scrubbing. Her physique is not strong enough for this, and her hands, in which she took such pride, are going to bits, cracked and rough and becoming grubby, so that if another millinery job presents itself she could not get it. These are the patients upon whom the money-grubbers in and out of our profession thrive.

Then there is the solicitor, much of whose business deals with companies. He acts as secretary and at the meetings has to sit by the chairman, a great man, but old and somewhat deaf himself, who expects the secretary to catch every word he says, will brook no mistake, nor accept any excuse. It is only on these terms that the company can carry on.

There is the nurse risen to the rank of staff and hoping soon to be a Sister, but the Matron will not allow her to go in for her C.M.B. because she is going deaf, and thus cuts her off from all promotion on the administrative side of her profession, since this depends upon her knowing how to bring babies into the world. It does not need much experience or knowledge of the world to multiply these examples, and the wage-earning capacity is only one of the acts of living. There is the young woman about to get married. Is it fair upon a husband to link himself to one who soon will be quite deaf? Is it right to risk bringing into the world children that may be suffering from the same complaint? There are all those persons who spend their lives looking after old people. They care for one elderly relative after another, till they find themselves going deaf and that they are elderly and older than the first old aunt whom they took care of forty years ago. Even the wealthy may be pitied. The young woman from Johannesburg who burst into tears when told about the future of otosclerosis and went all round Europe without being told it again. Her hobby was music, marriage had passed her by; money was no object, but what was she to take up now her interest in life was being excluded?

In every case the right thing is to face Fear. It will turn as it is faced. Often it will disappear altogether. Often it will remain terrible, but never so terrible as it was before it was faced.

Sea-Sickness

By W. G. Zorab, Esq., Assistant Surgeon, R.M.S. "Aquitania"

THREE months as Assistant Surgeon on the *Aquitania* have made it clear to me that most people regard sea-sickness as an "Act of God," a view that I must confess to sharing when I joined the ship. It is to try and correct this belief that this article is written.

Most of what I know I have learnt from Dr. J. Hill, M.D., Surgeon to the *Aquitania*, whose help and teaching I gratefully acknowledge.

It is a well-known saying that the more remedies there are for a malady, the less efficient they are likely to be, and never was this truer than in sea-sickness. This is, I think, because although the root cause—namely the unusual movement, whether in a ship, in an aeroplane, or in a car—is the same, its manifestations vary. Vomiting is, indeed, but one of several symptoms. Before describing these other symptoms let us first consider their immediate causes.

Most, if not all, cases of sea-sickness, uncomplicated by alcoholic "hangover," vomiting of pregnancy, etc., are due to the autonomic nervous system's reaction to the stream of unaccustomed impulses, to which it has not been able to "condition" itself. These impulses, in a susceptible subject, may lead to one of two extremes, namely—(1) a pure stimulation of the parasympathetic system (or vagotonia), or (2) a pure stimulation of the sympathetic system (or sympatheticotonia). Between these two extremes, which are uncommon, lies an infinite variety of combinations, which form the majority of cases. But from a careful clinical examination it is possible roughly to estimate whereabouts between the two extremes each patient comes.

VAGOTONIA

A "queasy" feeling is more often felt than actual nausea, which, in turn, is commoner than actual vomiting. If vomiting occurs it is apt to be sudden and unexpected (*i.e.*, reflex), gives relief from the nausea and only comes on occasionally. Constant and severe headache is an early and frequent symptom. Lassitude, both physical and mental, is also a common sign. The victims are cold, pallid and have a slightly sub-normal temperature. Their pulse rate is slow, around 60, and the blood pressure is below normal. These cardiac findings are probably responsible for the feeling of "dizziness" that is so often present. Increased salivation and diarrhœa may both occur, though constipation is much more frequent in all cases of sea-sickness.

SYMPATHETICOTONIA

Here, as one might expect, one finds the opposite clinical picture. Nausea is constant and pronounced; vomiting is common and often repeated and, when the stomach is empty, gives way to retching, possibly the most distressing sympton of all. Headache, if present, follows or accompanies this trio, and is probably due to them. The patient is often restless, excited or agitated; terrified that the ship will sink, in contrast to the "vagotonic," who doesn't care if it does. The pulse is usually raised, somewhere in the 80's, and the blood pressure is also probably up a little also, though comparisons and accurate readings are difficult with a restless patient and a rough sea. It is worth noting that about 75 per cent. of women sufferers belong predominantly to this class. These, then, are the two clinical purities, not often seen, but whose varying combinations go to the making of the different clinical pictures. One has to remember, too, that a predominant sign in one group may be masking some abnormal activity of the other group.

TREATMENT

The majority of those reading this article will be more concerned with the prophylactic, rather than the palliative, treatment of sea-sickness, and so will have to rely on their personal knowledge of the would-be traveller, with, perhaps, his or her previous experiences to guide him. Treatment may be divided conveniently under three headings: (1) Advice to the patient; (2) Preventative drug therapy; and (3) Palliative drug therapy.

1. *Advice to the patient.*—That advice has been sought indicates some degree of apprehension on the part of the would-be traveller, and it is well to commence by explaining that sea-sickness is not an "Act of God," but a transient malady amenable to sound medication. Once this point is established the patient will lose some of his or her dread of being left helpless in the clutches of an invincible enemy, and will have a greatly increased faith in the remedy prescribed, always an important point and one that will do much to increase its efficacy. Coming, then, to "do's and don't's"; fresh air is most important—many an odour that is harmless in more stable conditions

becomes nauseating when the normal constants of life are, literally, all at sea. Equally important is bodily warmth; for "vagotonics" this is best ensured by mild exercise, which helps to quicken the pulse rate. Sufficient sleep is essential, in order that both body and mind may be "in the pink" to resist the onslaught. Here it is well to remember the fatigue, worry and excitement that normally occur during the 24 hours before embarking. Some form of distraction is most valuable, but not always easy to obtain. Reading, writing, knitting and needlework are apt to lose their charm under the circumstances. Many find a firm abdominal binder a great comfort, and a prone, or semi-prone, position is usually the most comfortable.

Special attention should be paid to the bowels, as I am convinced that a loaded colon is a potent factor in the production of sea-sickness. No less important is the matter of diet. Here moderation, and again moderation, is the watchword. In an atmosphere warmed to 70°, and with exercise restricted by inclination, and the confined space of the ship, it is surprisingly easy to exceed one's calorific requirements when tempted by the varied menu which confronts one at meal-times. For the rest, the diet should be simple, and easily digested, with a fairly high carbohydrate and low fat ratio, as a precaution against ketosis. Amongst drinks, champagne and brandy traditionally hold pride of place, with dry ginger ale next on the list. Beer and whisky are the least popular. I think that a reasonable amount of alcohol may take the edge off a nervous person's apprehension, but the particular form it is taken in must remain a matter of personal taste.

2. *Preventative drug therapy.*—Any preventative prescription must be aimed at both halves of the autonomic system, and, except for short journeys, may well begin 24 hours before embarkation, in order that its action may have become effective before the ship sails. Tinct. belladonna, atropine and hyoscine (all by mouth) are all excellent to subdue the parasympathetic system, the dose depending on the estimated degree of vagotonia to be dealt with. For the sympathetic system, chloral and pot. bromide are as good as any. A good average mixture is :—

Tr. Belladonna	m. v.
Chloral	gr. v.
Pot. Bromide	gr. x.
Flavouring	qs.
Aqua ad	oz. ½

t.d.s., with a double dose on embarking.

Single doses of the mixture may be continued for the next 24-48 hours. A sedative should be given for the night prior to sailing, and another for the first night out, as the strange surroundings, combined with the noises of the ship, militate against sleep.

For a shorter journey, lasting only a few hours, a sedative the night before, combined with a mixture such as atropine gr. 1/50 and one of the shorter acting barbiturates an hour before sailing, will be all that is needed to ward off an attack.

3. Once the condition is established, stronger measures are required. Attention should be paid to the bowels, and some combination of the following mixture given :—

Chloral	gr. xv-xxv.
or	
Luminal	gr. i-ii.
Atropine	gr. 1/100-1/50.
or	
Hyoscine	gr. 1/100-1/50.
Flavouring	qs.
Aqua ad	oz. i.

One drachm of the mixture every half hour.

Those with a vagotonic preponderance often benefit a great deal from the addition of benzedrine gr. v to the mixture, but it must be remembered that it is subject to the usual contra-indications and is incompatible with chloral. The half-hourly dosage is important; firstly, it is more likely to be retained; secondly, the patient will fall asleep before there is any risk of over-dosage; thirdly, it fixes the patient's attention on the clock rather than the ship; and lastly, it gives a comforting impression of a relentless attack being waged against the malady. When recovery sets in, the time-interval may be lengthened, and the mixture finally stopped. Of other remedies opiates are often effective, but are constipating and have unpleasant after-effects. Chloretone (the effective part of the famous Mothersill's) sometimes works like a charm. Vasano (Schering) is one of the best proprietary preparations, containing chiefly hyoscine, and is available in suppository form.

It is rather interesting to note that, although "pitching" is much more deadly than "rolling," an elevator man at the Rockefeller Centre obviously thought that I was quite mad when I asked him if he had ever met with any cases of "lift-sickness."

In conclusion, may I hope that the foregoing article will enable some of you to protect either yourselves or your patients from what, to many, is a scourge, simply through lack of knowledge?

The Guy's Hospital Musical Society

FOR their second concert of the season the Guy's Hospital Musical Society performed on the evening of Wednesday, March 8th, Handel's " Acis and Galatea." This was preceded by Handel's " Occasional " Overture. Margaret Paterson conducted.

Acis and Galatea are, respectively, a shepherd and a sea nymph who love one another. Polyphemus is an unpleasant giant who loves Galatea also. The wooing of Polyphemus angers Acis, who unwisely decides to pit his feeble strength against that of the giant. He is slain. But for his constancy in love he is transformed into a god. This simple story Handel adorned with charming music. Damon, a shepherd, and the Chorus of Nymphs and Shepherds he used as commentators on the action.

The chief weight of " Acis and Galatea " has to be borne by the soloists. In this performance Dorothy Kealey was Galatea, John Jenkins was Acis, John Tucker was " the monster Polypheme," and Reginald Merryweather, Damon the Shepherd. Dorothy Kealey was a little quick and John Tucker was not always certain in his long Handelian phrases. Reginald Merryweather sang often with vigour. John Jenkins sang with a sense of style and a fair accuracy of note and he has a pleasing voice. His was the last solo performance. Considering the difficulties of this piece the soloists acquitted themselves bravely.

The chorus, once warmed to their task, sang with gusto and obviously enjoyed themselves. The orchestra, once having warmed themselves on the " Occasional " Overture, played with gusto and also obviously enjoyed themselves. There was an excellent oboe solo in the " Occasional " Overture and a difficult clarinet solo in the introductory music to " Acis and Galatea " that deserve mention. (But why did not the kettledrummer put his kettledrum in tune for the " Occasional " Overture ?)

Chief credit of all must go to Margaret Paterson, the conductor. She kept a steady beat, brought in the soloists, brought in the chorus, brought in the orchestra with masterful precision, and when difficulties arose firmly surmounted them.

Altogether, " Acis and Galatea " was a praiseworthy performance, and deserved a much bigger audience than it got.

E. B. R.

A Therapeutic Note

By Sir Harley Wimpole, M.A. (Anderman), D.Sc. (Perim), M.D. (Tristan d'Acunha), Hon. LL.D. (Spitzbergen), D.C.L., *hon. caus.* (Erewhon).

AS you are doubtless aware, I have recently returned from Erewhon, to which country I journeyed to receive the degree of D.C.L. (*hon. caus.*) from the Royal University.

During my stay I had the opportunity of visiting many hospitals and seeing something of the recent advances in medicine which have taken place in that country.

The most striking of these was the development of a form of treatment long known in this country for a condition very prevalent among women, under the name of " The Swillo Treatment."

Sufferers from this disease are usually young married or engaged women, and the symptoms manifest themselves on Monday of each week, when the husband or fiancé happens to receive theatre tickets, or invitations to other social events, available on that evening. They complain that they never seem to get over that dreadful rubbing and scrubbing on Monday, as a result of which they are reduced to a condition of extreme fatigue. If they *do* accompany their partners to the show they invariably spoil his evening, irritate his temper, and are the cause of most painful bickering. They rarely seek medical advice. What usually happens is that they run to their mothers or more experienced friends, to whom they relate their symptoms—being doubtless more distressed by the disturbed relations than by the actual fatigue.

The treatment is simple and the results miraculous. It consists in giving their whites the Swillo 2-MINUTE BOIL and their coloureds the Swillo 12-MINUTE SOAK.

It is to Professor Kcauq, of Erewhon, at whose *clinique* I delivered my clinical lecture on *Starvatio nocturna*, that we owe the development of this treatment.

Patients are treated in a special annexe containing a laboratory designed on the lines of a laundry, in order that treatment may be carried out on the spot. As male patients only are treated, there are no arrangements for segregation of the sexes. When they have been seen by the Professor and the necessary treatment prescribed, they are given a number and pass into the undressing room, where their clothing is removed, sorted into whites

and coloureds, each being labelled with a corresponding number. They are then seated upon a slowly moving belt which takes exactly twenty minutes to traverse the annexe. This gives two and a half minutes at each end to allow for transport of the whites and coloureds to and from the laboratory. On arriving at the end of the belt, they hand in their numbers and receive in return their whites and coloureds, which have been subjected to the Swillo 2-MINUTE BOIL and the Swillo 12-MINUTE SOAK respectively.

Although the time I was able to spend at the *clinique* was necessarily short, I saw sufficient to convince me of the results of the treatment. The following were a few of the cases :—

CASE 1.—Male, aged 21, single. Traveller in vacuum cleaners. Mistakenly diagnosed as *Starvatio nocturna* and obtained no relief from treatment. Symptoms : disinclination for exercise, dislike of walking, depression, engagement recently broken, persistent somnolence.

When stripped, was found to be wearing—(*a*) *Whites* : (i) collar (doubtful), (ii) Ricardo. (*b*) *Coloureds* : (i) shirt (green), (ii) undervest (navy blue), (iii) pants (dark pink), (iv) socks (one grey, one blue), (v) tie (Old Borstallians).

Result of treatment.—Ran round the annexe 275 times looking for Professor Kcauq. Lap distance, 150 yards. Best lap time, 12/2;5 secs.

CASE 2.—Male, aged 25, actor, married. Referred for treatment for B.O. from the Institut Marcus Aurelius.

When stripped, was found to be wearing—(*a*) *Whites* : Nil or otherwise indeterminate. (*b*) *Coloureds* : (i) Undervests, three (one grey, one black, one green) ; (ii) pants, minus seat (brown) ; (iii) socks, without feet (purple when examined through blue glass under U.V.R.).

Result of treatment.—As this was an extremely severe case it was decided to put the patient in with the Coloureds for the Swillo 12-minute Soak. This was only partially successful, so he was transferred for the Swillo 2-minute Boil. Much improved and is now playing the part of Bromos in " The Romance of the Sewage Canal."

As funds become available it is hoped to make provision for drying both the Whites and the Coloureds before they are handed back to the owners, and so avoid the unpleasantness which sometimes arises between the patients and Professor Kcauq.

Note.—Some care is necessary in differentiating the condition known as " *l'haine de blanchir* " from *Starvatio nocturna*. The former only attacks the patient on washing day.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.

(*continued*)

During the operation Allen's chauffeur bought me a Brownie at a drug store, but we changed it for a folder at 90 cents more, as being more portable. We drove first along the seashore, which looks out on to the America's Cup Course. We have nothing like this in England—a whole town of enormous houses with lawns and elaborate gardens. There are such houses everywhere in England, of course, but not more than two or three together ; here they covered all the hills overlooking the water. The coast line, too, is unlike anything I have seen in England, or indeed, in Europe, and is ideally suited for a holiday place. Our coastlines are either straight and low, or indented and high, so that each bay is hidden from the next. Here there was an intricate system of bays, creeks, inlets, peninsulas and islands formed by the projections and recessions of low rounded glacial rocks, an ideal setting for playing or sailing and a first-rate foundation for a holiday house. With it there are several stretches of lovely sand.

We stopped at Herreschoffs next, and there were " Weetamoe," " Ranger," " Resolute," and another drawn up side by side. The whole place was locked up and in charge of a caretaker, it being a public holiday, and it seemed too bad, when I had the greatest stroke of luck. "Ranger's " skipper, Captain Mousell, had been on a month's holiday in Vermont after laying up the boat, and was just passing through on his way for another two months' leave. He called in for ten minutes, and not only let us in, but took us aboard and showed us everything. I took seven photographs which I hope may come out.

What struck me about " Ranger " is her flattened and rather ugly stern, the buttock lines being broken to sweep more horizontal. I thought this was her secret, giving her a long run. The whole point, however, is that she has gone in for true streamline, having her greatest beam well forward of amidships She is beautifully built, rivetted, but absolutely flush on the outside. Everything is severe and efficient. The deck has

a rail round that looks like gas piping, about four inches up, just high enough to stop a slide. There is a battery of winches and cleats amidships. Below she has quite cosy cabins of the simplest type, and an open runway from end to end for putting sails in stops. Amidships is a hatch over the centreboard casing, and on each side slats over the frames, making the whole into a sail locker. In the forepeak is a long curved chute, like a half-section of a curved drain-pipe polished inside, for handing headsails up to a hatch on deck.

We (Allen, chauffeur, nurse and I) had lunch at a drug store and sped home, where Allen found an emergency waiting. However, he got it done in time to catch the 5 p.m. train to New York. On the train were Lund (City Hospital) and his father, and Brewer and his wife. We went to the Waldorf Astoria, headquarters of the meeting.

New York, Friday, November 12th

We went at 8.30 to the new Cornell Medical Centre—a brand-new hospital. It is built like a sky-scraper cathedral, of white brick, with great Gothic windows spindling up 40 or 50 stories, and the bricks arranged in fan traceries between them. There were two hours of operations. First watched George Heuer doing a breast, then junior doing a common bile duct. I sat next to Charles Mixter, and he was talking about Hippuran, some new substance to use instead of Lipiodol. He uses it a lot for injecting common ducts on table and X-raying before opening it. It shows up stones, strictures, and goes into the branches in the liver. Advantage is that it flows easily through a fine needle. After this we had the series of clinical presentations. As a speaker, thinker and leader, George Heuer is obviously a great man.

THE SOCIETY OF CLINICAL SURGERY

New York City, Nov. 12th and 13th, 1937.

Friday, November 12th.

The New York Hospital, 525, East 68th Street.

8.30 to 10.30 a.m.—Operations by members of the Staff.

10.30 a.m. to 1 p.m.—Clinical Presentations.

Dr. George J. Heuer: "Further Development of the Graduate Teaching Program."

Dr. William DeW. Andrus and Dr. N. Chandler Foot: "Mediastinal Tumors, Classification and Presentation of Illustrative Cases."

Dr. John R. Carty: "X-Ray Treatment of Mediastinal Tumors."

Dr. William F. MacFee: "Femoral Transplantation of the Cord in Inguinal Hernioplasty."

Dr. Frank Glenn and Dr. Samuel W. Moore: "150 Cases of Acute Cholecystitis treated by Early Operation."

Dr. Bronson S. Ray: "A Method of Indexing Operations."

Dr. Ralph F. Bowers: "Case Presentations."

Dr. Cuyler Y. Hauch: "Operation for Pilonidal Sinus."

Dr. Harold J. Stewart: "Cases of Adhesive Pericarditis treated by Pericardiectomy."

Dr. Herbert Conway: "Hypertrophy of the Mucous Glands of the Lip."

2 p.m. to 4.30 p.m.—Presentation of Experimental Work.

Dr. Cranston W. Holman: "Pre-operative and Post-operative Studies of Gastric Secretion."

Dr. Joseph C. Hinsey: "Observations on the Sensory Components of the Phrenic Nerve and Diaphragmatic Sensation."

Dr. Robert A. Moore: "Studies of the Blood Lipid Amino Nitrogen."

Dr. Joshua E. Sweet: "The Ductless Glands and Carbohydrate Metabolism."

Dr. William DeW. Andrus: "Studies of 'Toxic Shock.'"

Studies on Hypertension

Dr. Frank Glenn: "The Destruction of the Spinal Cord in Animals with Hypertension, with a Brief Review of the Production of Experimental Hypertension."

Dr. Charles G. Child, Dr. Earl P. Lasher and Dr. William T. Medl: "An Improved Apparatus for Determining Systolic and Diastolic Blood Pressure in the Dog."

Dr. Charles G. Child: "Pathological Lesions Developing in Animals with Experimental Hypertension."

Dr. George J. Heuer: "Correlation of Experimental and Clinical Investigations in Hypertension."

Saturday, November 13th

The Roosevelt Hospital, 438, West 59th St.

8.30 to 11 a.m.—Operations by members of the Staff.

11 a.m. to 12 noon.—Clinical Presentations.

Dr. Sterling Mueller: "The Intravenous Use of Alcohol in Post-operative Treatment."

Dr. Howard A. Patterson: "An Unusual Case of Osteitis Fibrosa Cystica, Localised Form."

Dr. Thomas T. Mackie: "Mechanism of Ulcerative Colitis and Indications for Treatment."

Dr. Frederick Amendola: "Experiences with a New Hernia Repair."

Dr. Lawrence Sophian: "Late Complications of Biliary Disease (Pathological Specimens)."

Dr. Henry Cave: "Some Unusual Surgical Cases."

Andrus's and *Foot's* mediastinal cases were :—

1. Adult female. Rounded tumour removed that proved to be lipo-sarcoma.

2. Girl of 12. Tumour found on routine X-ray. Turned out to be a cyst arising from thymus.

3. Boy aged 12, complaining of loss of weight, dyspnœa, orthopnœa. X-ray showed enormous tumour filling whole left side of thorax and displacing mediastinum. Long 7th intercostal space incision. Lump, weight 2,500 gms., shelled out, except for small bit left in mediastinum. Looked like lipoma, but turned out to be a thymoma.

Stewart talked about operation for adhesive pericarditis. They have had nine cases in two years ; all operations done by Heuer. Details too complicated to write, but there must be an article somewhere. Three cases were shown, most impressive. The incision is a large flap. He resects 3rd, 4th and 5th, sometimes 6th, costal cartilages. Through this approach he can get well under sternum and can resect all the pericardium he needs (Churchill apparently decorticates the muscles sometimes, but Heuer does not).

Two of Heuer's cases were tuberculous, the others of unknown ætiology. Rheumatic fever is not an important cause. Several cases have a vague history of previous " pulmonary infection."

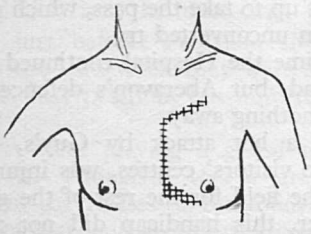

Fig. 102.

Conway on hypertrophy of the glands of the lip. Condition seems to have been described by Volkmann in 1870, and 120 cases have been reported. Three shown, in each the upper lip involved. Wide, sub-mucous plastic. Result as shown, improved, but still a bit peculiar.

MacFee.—Someone has done operation by pulling testicle out of cord, pushing it under transversalis fascia, through inguinal canal and back into scrotum. MacFee, not unnaturally, finds this pretty traumatic, vessels being divided in extracting the testicle from the scrotum, and great strength being needed to force it through the crural canal (? how is it possible). MacFee divides Poupart and Gimbernat's ligament and puts cord directly into canal, repairing ligament afterwards. Canal is then completely closed by some overlapping method, repairing also transversalis fascia. His pictures showed cord lying rather far out, over femoral vein, but he says he does not do this. He seems a good chap and is putting this forward as an idea, with no claims as he has not watched it long enough.

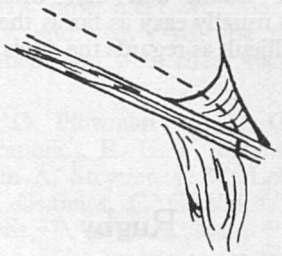

Fig. 103.

Hauch discussed pilonidal sinus, with an idea to get rapid healing. His cases heal in two to six weeks. Essential of method is small skin but very wide fat excision, and skin edges tacked to fascia over sacrum.

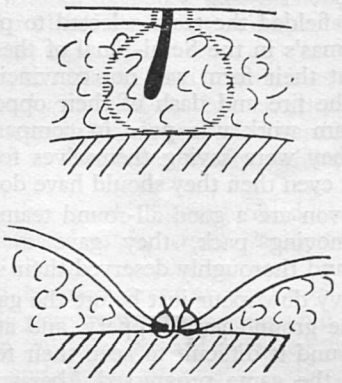

Fig. 104.

Glenn presented the case for operations on acute cholecystitis. They have 170 cases, with a mortality of about 3 per cent. Half the cases, with a total history of under a year, had no deaths ; the mortality was in the others. Their great card is the risk of perforation and general peritonitis, and they had a number of slides showing Rokitansky-Aschoff sinuses, some in normal gall bladders, some in the walls of perforated ones. These sinuses are pockets of mucous membrane projecting through the muscular to the subserous coat.

There was a good deal of heckling, especially as to what they meant by acute (the average elevation of temperature was about $\frac{1}{2}^{\circ}$ C.) and what they meant by peritonitis. Evarts Graham was a most strenuous opponent. " We are only justified in

interfering with the preliminary stage of an inflammatory process in order to avoid greater risks. If we break this rule, we are casting aside all the knowledge we have so carefully acquired. The risks are real in appendicitis, but not in cholecystitis." I would add that while the acute operation is usually easy as far as the gall bladder goes, it is difficult as regards the ducts, and I would expect a high incidence of duct stones and strictures to follow a wide adoption of this policy.

Holman on gastric secretion was not very convincing. He said that diagnosis by test meal was 100 per cent. accurate. He mentioned that they found in quite a number of cases the free HCl higher after gastro-jejunostomy than before.

(*To be continued.*)

Sport

Rugby

Guy's v. Aberavon

(*At Honor Oak Park on Saturday, March 4th*)

ALTHOUGH the Hospital ran Aberavon close earlier in the season, they were well beaten by the Welsh side in the return fixture, the visitors winning by 2 placed goals, a dropped goal and 3 tries (23 points), to a placed goal and a try (8 points).

Guy's fielded the team selected to play against St. Thomas's in the Semi-Final of the Hospitals' Cup, but their form was not convincing. They lacked the fire and dash of their opponents and their team work was poor in comparison. No doubt they were saving themselves for the Cup Tie, but even then they should have done better.

Aberavon are a good all-round team, and with a fast-moving pack, they gave a convincing display and thoroughly deserved their success.

A heavy downpour just before the game started made the ground very slippery, and at first both teams found it difficult to keep their feet. However, as the game progressed Aberavon adapted themselves better to the conditions and handled the greasy ball with accuracy and skill. Some of their passing was first-class, and the forwards were always ready to support the backs when necessary.

Guy's started off with a grand dribble which carried them to their opponents' goal-line, but, after two or three scrums, J. Thomas relieved and found touch near the Hospital's 25. Aberavon obtained possession in the line-out, and eventually the ball reached J. Thomas, who scored an unconverted try.

Within five minutes the visitors scored again, this time following a grand three-quarter movement which carried Aberavon from one end of the field to the other. Splendid passing between Thomas and Griffiths finished off the effort, and again the former scored, for S. Williams to add the goal points.

A little later Aberavon went further ahead when W. Davies scored an excellent try, which Williams converted.

After this reverse, Guy's rallied and, following good work by Babrow and Van Steytler, Kynaston scored a fine try, which Plowman converted.

However, just before half-time the visitors went further ahead. For several minutes they pressed in the Hospital's 25, and one of their forwards actually crossed, but was called back for a forward pass. However, following a five-yards' scrum, the ball was whipped out to J. Brothers, who dropped a perfect goal.

After the interval, Guy's improved and Babrow cut through the centre in magnificent style, and Camp was up to take the pass, which enabled him to score an unconverted try.

For a time the Hospital continued to hold the upper hand, but Aberavon's defence was sound and gave nothing away.

During a hot attack by Guy's, W. Davies, one of the visitors' centres, was injured and had to leave the field for the rest of the game.

However, this handicap did not affect Aberavon's game, and towards the end they monopolised the play and obtained two further unconverted tries as the result of fine efforts by G. Davies and R. Williams.

Team.—R. D. Plowman; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. van A. Steytler, J. W. Lewis; D. N. Fuller, H. F. Osmond, C. C. Vidot, J. Forbes, J. C. Bulstrode, P. Fletcher, D. P. Finnegan, J. R. D. Williams.

Inter-Hospitals Cup Semi-Final
Guy's v. St. Thomas's

(*At Richmond on Tuesday, March 7th*)

ST. THOMAS'S defeated Guy's in the first of the Hospital's Cup semi-finals by the narrow margin of 1 point, St. Thomas's scoring 2 tries (6 points) and Guy's a placed goal (5 points).

From Guy's point of view the result was very disappointing, but those present will admit that in this game at any rate St. Thomas's were the better side and thoroughly deserved their success. They had to face a strong wind during the first half, and the game had been in progress no more than five minutes when Ritchie, their left centre, injured a leg in a tackle. Luckily he was able to resume, but after a short spell in his proper place he had to spend the rest of the game limping on the wing. This was a big blow to St. Thomas's, but, in spite of the handicap, they stuck to their task and gave nothing away.

Although they had the wind in their favour, Guy's could make little impression against a cast-iron defence. Osmond was in magnificent form and obtained the ball regularly in the set scrums, but, although the Guy's threes were aching to get the ball, Lewis at scrum half had one of his off-days and seldom got the backs in action. When they did obtain possession, they found themselves so closely marked that very little progress was made.

As the game progressed, it looked as though Guy's would not score, but ten minutes from half-time Babrow eventually obtained possession, cut through the centre and sent Camp over for a try near the corner flag, which Plowman converted with a grand kick from the touch-line.

However, just before, Plowman should have given Guy's the lead when they were awarded a penalty in an easy position, but unfortunately he just missed.

Both packs were playing a grand game, and Lytle, for St. Thomas's, was a great leader, always first in the rushes or the following up, a devastating tackler, and an untiring coverer. He was strongly supported by Rea, the fly-half, who in the second half kept the Guy's defence on tenterhooks by his variations between the break through and kick ahead.

In spite of Steytler's excellent kicking and Babrow's fine generalship, Guy's could not get going. After the interval they packed 3-4-1, took scrums for lines-out, and the backs began to move well. On one occasion Hartley made a good run on the left wing and looked certain to score, when he was thrown into touch near the corner flag.

Having recovered from these early shocks, St. Thomas's settled down and a series of long kicks ahead worried Plowman considerably.

Twelve minutes from the re-start St. Thomas's reduced the deficit with a well-deserved try by Jackson, following good work by Lytle.

A few minutes later, St. Thomas's took the lead when Rea carved out a glorious opening for Nixon, who scored an unconverted try in the corner.

Guy's made desperate attempts to regain the lead, and though Babrow, Steytler, Forbes, Fletcher and Kynaston made despairing efforts, St. Thomas's covered up exceedingly well and prevented any further score.

St. Thomas's now meet St. Mary's or St. Bartholomew's, and Guy's will be the first to congratulate them and wish them success in the Final.

Team.—R. D. Plowman; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. van A. Steytler, J. W. Lewis, D. N. Fuller, R. F. Osmond, C. C. Vidot, J. Forbes, J. C. Bulstrode, P. D'O. Kolesar, P. Fletcher, D. P. Finnegan.

Guy's v. Bedford

(*At Bedford on Saturday, March 11th*)

BEDFORD, considered to be the strongest side in the Midlands, were too good for Guy's. During the first half they scored 18 points without response and eventually won by a placed goal and 6 tries (23 points) to a penalty goal (3 points).

The Hospital played well together as a team, and their backs handled the ball excellently, but, in spite of sound passing and good running, they were unable to elude the deadly tackling of the defence.

On the other hand, Bedford relied mainly on the loose forward game, which was better suited to the conditions.

Play had been in progress only two minutes when Guy's were awarded a penalty, but the kick was missed. A fierce forward rush sent them back to their 25, and shortly afterwards Bedford carried out a fine passing movement which ended in A. Cook scoring a try. He failed to convert this effort, and a little later missed a chance to add the goal points when Thevenard scored a try on the opposite wing.

The exchanges were fast, but both sides handled the greasy ball very well. However, Bedford continued to hold the upper hand, and Rogers went over for a third try. He took a difficult low pass from Thevenard, half stumbled, but recovered sufficiently to dive over the line.

Almost from the kick off Bedford scored again, following a great run by Staples, who reached the line but was forced to part with the ball, which went loose. During the scramble which followed, Smyth won the touch-down for a try, which Cook converted, and just before the interval, McMaster followed up a punt ahead, passed to Dancer, who scored another try, which was not converted.

The second half was contested more evenly,

but Bedford were the first to score. Ten minutes after the re-start J. Power scored an opportunist try by dribbling a loose ball over the line, and immediately afterwards Van Steytler made a good attempt to drop a goal for Guy's.

Thanks to Osmond the Hospital three-quarter line received the ball time after time, but, although they carried out some excellent movements, they could not beat Bedford's defence.

Towards the end Kynaston kicked a penalty goal for Guy's and G. Power registered an unconverted try.

Team.—R. D. Plowman; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. van A. Steytler, J. W. Lewis; D. N. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, P. Fletcher, A. Forbes, D. P. Finnegan, C. Christellis.

Guy's v. Old Alleynians

(*At Honor Oak Park on Saturday, March 18th*)

AFTER a hard struggle Guy's beat the Old Alleynians at home, by 2 penalty goals and 2 tries (12 points) to 2 penalty goals and a try (9 points).

The Hospital made several changes in the side which was so heavily beaten at Bedford. W. B. Sanders, who had been showing good form for the "A," was given the position at full-back, and in the pack D. Gullick, of Taunton, and J. P. Rochford were included in place of D. N. Fuller and P. D'O. Kolesar, who were unable to turn out.

Play was rather patchy at first, but gradually both sides settled down and in the second half the game became very exciting and interesting to watch.

Babrow was at the top of his form and electrified the crowd with a great display. On several occasions he swerved his way past three or four defenders, but although he was ably supported by Van Steytler and Kynaston, who put plenty of thrust into the Hospital's attack, somehow things always went wrong when a movement needed the finishing touches.

Osmond, the Hospital's hooker, was again in great form and secured the ball from nearly every scrum, which was all the more remarkable in view of a knee injury which kept him off the field for a quarter of an hour during the first half.

Bulstrode, Fletcher, Finnegan and Vidot worked hard and were always prominent in the loose.

In the first minute, these players led a storming raid on the Old Boys' line, but they were repulsed, and almost immediately the visitors took the lead when Griffith kicked an easy penalty goal.

Guy's responded with a grand forward rush initiated by Christelis, and eventually Camp seized an opportunity and scored a splendid try, which was not converted.

A ding-dong struggle followed and, after Van Steytler, Babrow and Kynaston had tried to find gaps in the Old Boys' defence, the visitors were penalised for offside and Sanders kicked a goal. However, Guy's lost their advantage soon afterwards when they were penalised for a scrum infringement and from a difficult angle Griffith made the scores level.

After the interval, Guy's took the lead as the result of another penalty goal kicked by Sanders, and, following a fine bout of passing and a great run by Babrow, Kynaston scored a great try, but Sanders was unable to add the goal points.

The Old Boys struggled hard to reduce the deficit, and on one or two occasions nearly got through, but the Hospital defence was sound.

However, just before the final whistle Griffith crashed through the centre at an amazing speed and scored a try near the posts, but the easy kick at goal was missed.

The last five minutes were very exciting, both teams attacked in turn, until the whistle sounded for no-side.

Team.—W. B. Sanders; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp, J. van A. Steytler, J. W. Lewis; J. P. Rochford, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, C. Christelis, D. Gullick, D. P. Finnegan, P. Fletcher.

Guy's v. Gloucester

(*At Gloucester on Saturday, March 25th*)

THE President of the Gloucester Club, Dr. A. Alcock, an old Guy's man, must have been pleased with the form displayed by the Hospital in this game, which the home side won by 2 placed goals and a try (13 points) to a placed goal and a penalty goal (8 points).

Guy's received a warm welcome from the home team's supporters, and gave a much better account of themselves than the score would suggest. They played attractive open football, and had they finished off the many brilliant movements initiated there is no doubt that Guy's would have won.

Thanks to a hard-working pack and Osmond's brilliant hooking, the Hospital received the ball from nearly every scrum, but the ball was heeled too slowly for the backs to take advantage of the many opportunities which came their way.

Hughes and Thornton were very smart away from the set scrums, and although Crawford, deputising for Van Steytler, and Lewis worked hard they found it difficult to avoid the attentions of these quick-moving wing forwards.

Gloucester missed Carpenter, their hooker, but the Citizens' inability to heel did not spoil their attack. The dash and vigour of their forwards quite upset the Hospital's schemes, and some good footwork was carried out by Thornton, Day and Mustoe.

Babrow was in excellent form and scored the best try of the afternoon, receiving from Crawford, he made a dazzling solo run from half-way and scored a great try, which Sanders converted.

After tries had been scored by Day, H. N. Hughes and Bonn, two of which Boughton converted, Sanders kicked a penalty goal for Guy's.

It was a very exciting finish, and during the last quarter of an hour the Hospital delighted the spectators to a magnificent exhibition. Their running and passing was a delight to watch, but, try as they did, they could not finish off several excellent movements which deserved to succeed.

Teams.—W. B. Sanders; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. P. Crawford, J. W. Lewis; D. N. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, A. Forbes, P. Fletcher, D. P. Finnegan, C. Christelis.

Golf

THE Hospital played a return match against King's College at Sidcup on Wednesday, 15th March.

The Sidcup course was playing very well, and there were some very keen and hard-fought matches. The match was finally drawn, each side winning four of the eight singles.

Results were as follows :—

Guy's		*King's*	
J. C. Ritchie (4 & 2)	1	C. A. Robb	0
J. W. R. Drury (1 up)	1	P. H. Bolton	0
S. A. March (3 & 2)	1	S. O. Appleby	0
T. F. E. Brown (3 & 2)	1	I. Bartholomew	0
N. J. Whelpton	0	W. B. Greig (7 & 5)	1
D. C. Stephen	0	A. C. Menzies (3 & 2)	1
M. J. Trott	0	N. Lewton-Brain (3 & 2)	1
H. B. Unstead	0	B. Buchanan (3 & 2)	1
Total	4	Total	4

Hospital Information, etc.

Notices

NUFFIELD HOUSE
RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer in Nuffield House.

The appointment carries a salary of £300 per annum, and, in addition, board and lodging is provided at the College.

The appointment is for a period of six months in the first instance, and may be renewed on application.

The accepted candidate will be required to take up his duties on 1st June, 1939, and applications should be sent, not later than Friday, 14th April, 1939, addressed to B. Lees Read, Clerk to the Governors, Counting House, Guy's Hospital, from whom copies of the Standing Orders for the Resident Medical Officer of Nuffield House may be obtained.

THE ADRIAN STOKES MEMORIAL FELLOWSHIP

Applications are invited for nomination to the Adrian Stokes Memorial Fellowship. The Fellowship is open to duly qualified Medical Practitioners or Graduates in Science, Pathology or Bacteriology.

Applicants must not be more than 30 years of age and must be anxious to carry out further study in Pathology or Bacteriology in any of their branches.

The Adrian Stokes Memorial Fellow is required to carry out this study during a period of not less than six calendar months in his year of tenure, at a university, school or hospital or other institution, subject to the approval of the School Council, except the school in which he has received his medical or scientific education. The Fellowship is of the value of approximately £200.

Applications for nomination to the Fellowship must be lodged with the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, not later than 24th April, 1939.

ERRATUM

We wish to apologise for an error which occurred in the review, published in our last issue, of "Progressive Practice," by Mr. Edward Samson. The author's name appears there as Mr. Edward Simson.

Pass List

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
March, 1939.

Midwifery.

R. M. J. Franks
G. L. L. Reynolds
*R. G. Ticehurst

* Has now completed the examination.

UNIVERSITY OF CAMBRIDGE.
EXAMINATION IN PHARMACOLOGY FOR MEDICAL AND SURGICAL DEGREES.
Lent Term, 1939.

C. H. G. Chase
G. G. France
M. C. Mundle
J. P. H. Ogilvie
D. B. Roberts

FIRST M.B. EXAMINATION.
Lent Term, 1939.
PART III.
Elementary Biology.

W. S. Sugden.

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FINAL EXAMINATION.
February-March, 1939.

Surgery.

J. L. Badgett
H. Brock
D. M. Cushing
W. F. Dunn
I. O. Enos
A. Forbes
S. Holt
R. G. James
M. R. C. Kemp
P. D. Kolesar
E. J. Martin
S. G. McCallin
L. G. Morgan
H. J. Nicholls
W. A. T. Parsons
G. G. G. Rees
H. Rees
E. S. Smith
G. M. Turner

Dental Surgery.

C. H. Blockley
G. E. Clarke
N. F. Clarke
G. W. Dorr
N. S. Harris
R. A. E. Keeler
M. Malleson
L. G. Morgan
D. L. Power
R. K. Roberts
A. Southwell
J. Symmons
C. W. Turner
L. A. Wakeford
H. W. Walker-Smith
L. J. Wallace
E. R. Walmsley

CONJOINT BOARD.
FIRST EXAMINATION.
March, 1939.

Anatomy.

H. A. Buck
R. A. H. Dubery
P. Morrell Thomas

Physiology

H. A. Buck
R. A. H. Dubery
W. H. Lillywhite
M. Wilks

Pharmacology.

B. Alhadeff
J. C. Bulstrode
G. H. G. Chase
E. W. Crews
P. C. Dismorr
C. H. Dunn
M. L. H. Evans

March, 1939.

Chemistry.

A. R. K. Ashton
T. C. Collins
B. H. Dicker
J. E. Dyke
J. Elder
M. A. Filose
F. H. Jowett
G. F. King
C. S. Matthews
D. A. Reaney
J. N. Stainforth
J. M. Stoner
L. I. Tewfik

Physics.

T. C. Collins
D. F. L. Cook
J. Elder
R. E. Hyman
J. C. Matthews
D. A. Reaney
J. N. Stainforth
J. M. Stoner
L. I. Tewfik

Elementary Biology.

P. C. S. Campion
K. E. Clokey
R. W. Edwards
A. A. Halamandres
B. C. McKenzie
J. E. Pountain
D. A. Reaney
D. Redpath
J. M. Stoner
J. K. Yerbury

Papers by Guy's Men

R. E. Smith. Anterior poliomyelitis and polioencephalitis. *Proc. Roy. Soc. Med.*, 1939, xxxii, 423 (Sect. Epidemiology and State Medicine).

G. A. M. Lintott. The practical application of gastroscopy. *Ibid.* 533 (Sect. Medicine).

R. C. Brock. Aneurysm of the popliteal artery: Investigation by arteriography—Cure by Hunterian ligature. *Ibid.*, 440 (Clin. Sect.).

A. H. Douthwaite. The treatment of rheumatoid arthritis. *Med. Pr.*, 1939, cci, 294.

Norman Burgess. Chronic urticaria. *Brit. Med. J.*, 1939, i, 662.

E. G. Slesinger. The treatment of thyrotoxicosis. *Med. Pr.*, 1939, cci, 274.

W. E. Herbert. Fused porcelain. *Brit. Dent. J.*, 1939, lxvi, 321.

G. B. Palmer. A case of Huntingdon's chorea. *New Zealand Med. J.*, 1939, Feb.

R. C. Brock. Thoracoscopy and cauterisation of adhesions. *Brompton Hospital Rep.*, 1938, vii.

Appointment

David Erskine, Honorary Dermatologist to the Dreadnought Seamen's Hospital, Greenwich.

Change of Address

J. Trevor Holford, L.D.S., 24, Harcourt House, 19, Cavendish Square, W.1. *Langham* 1252 and 2244.

Birth

BAYLIS.—On March 17th, 1939, at the London Clinic, to Joyce (née Squire), wife of Harold Paxton Baylis—a son (John).

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *22nd April 1939* — *Number 1324*

PASSIM

TO-DAY we publish the annual review number of the *Gazette*, and we hope that the account given in the following pages of books sent to us for review will be both instructive and entertaining to our readers.

The functions of a review are worth examining, and when we do so, at least three factors emerge. It must tell the reader what the book is about, it must give him the personal opinion of the writer, and it should be a respectable piece of writing on its own. The first of these is pre-eminent in reviews of a scientific nature. All books whose purpose is to set out a series of facts, to draw conclusions from them, and thus to build up a logical theory, recommend themselves to the reader in proportion as their subject is useful or interesting, and as their conclusions are sound. The opinion of the reviewer is only of value in so far as he has greater or special knowledge of the subject, and is therefore able to advise the reader as to the usefulness of the book. Thus the surgeon advises the student as to which is the better text-book of surgery, or the bacteriologist advises the surgeon on his own speciality.

In reviews of matters of art, on the other hand, such as a novel or a play, the facts of the subject of review are taken for granted, and the personal opinion of the reviewer is what the reader wants. This is only to say that agreement as to factual truth is more easily arrived at than æsthetic, but æsthetic criticism is required in reviews of scientific papers, and is shown by the reviewer giving his personal opinion as to whether the style is clear of the matter properly handled.

The third function of reviews, to be readable in themselves, is again less important when a description of fact is the major function—or rather, it is no less important but more easily accomplished. Clarity is what we all want in any criticism, and it is much easier to be clear in a scientific discourse than in one concerned with art. But, nevertheless, style is important in any form of writing, and for most of us is only to be learnt by practice.

A form of review which was popular in the eighteenth century, and reached its zenith in Macaulay's Essays in the *Edinburgh Review* of a hundred years ago, illustrates this third function. Here the reviewer, under cover of criticising a book, wrote a full-length essay of his own which often strayed far from its primary subject. Here the main interest to the reader is not so much the judgments contained in the review as the original thoughts of the author. Dr. Johnson, talking of reviews in 1776, said: "The critical Reviewers, I believe, often review without reading the books through, but lay hold of a topic and write chiefly from their own minds. The Monthly Reviewers are duller men, and are glad to read their books through."

There is much difference of opinion as to whether the authorship of a review should be published. Boswell, later in the same discussion, observed that he wondered to find so much good writing in the reviews, when the authors were to remain unknown. Johnson replied, with his usual good sense: "Nay, sir. Those who write in them, write well, in order to be paid well." Yet if the criticism is to be secondary to the original matter of the reviewer, and his reputation as a writer is at stake, it is reasonable that his identity be known, as in any other form of literature.

In the literary world of the present day, however, the disadvantage of signed reviews are considerable. Modern publishing is an organised industry, and the great days of the essay-review are over, though they are continued to a certain extent in the weekly journals. Modern reviewers are too frequently fellow-novelists, on whom for the moment their

colleague's bread and butter depends, but for whom the positions will shortly be reversed. There are great temptations inherent in this situation, which are increased by the sinister ritual of publishers' cocktail parties and the organisation of modern advertising.

Happily in the scientific world the financial motive, though present, is not so fully developed, and most scientific journals publish their reviews signed, or at least initialed, though this is not the case with the two leading medical weeklies. It has been for some years the practice of the *Guy's Hospital Gazette* to publish reviews above initials, if the authors permit it, and this for the reasons that the financial motive is negligible, and it makes for more interesting reading.

▭

IT is time that those who use the College Reading Room were invited to pay more attention to the convenience of the community. Some people are unable to satisfy themselves that they have read a paper unless they have torn it to pieces; others are too apt to express their political disagreement with the editor of a paper by trampling upon it. We believe the first to be an example of bad manners, the second of bad politics. And both are examples of egotism, for may not the next reader wish to treat them similarly, and how can he if they have been mauled already?

It can take very little trouble to leave the papers in the Reading Room approximately in the condition in which they were taken up—certainly far less trouble than is required to find the constituents of a daily that have been scattered about the room, or a weekly that has been divorced from its appropriate leather cover. The convenience of the community needs no very high morality for its defense; let us once and for all admit that, in profiting the majority, we are in fact profiting ourselves.

▭

ON Monday last 200 stretchers supplied by the Government were delivered to the Hospital. Experiments showed that, being some 2 feet longer than our trolleys, they were about 7 inches too long to fit into any of the six lifts of the Hospital. In no case was it possible to fit them into a lift diagonally when the stretcher was unfolded. Measurements of the unfinished lift-shaft in the Medical Block suggested that the same conditions would obtain here.

No doubt the stretchers are designed mainly for transporting patients from the Hospital to the bases, but it will be important to remember that all cases requiring treatment above or below the ground floor must be removed from stretcher to trolley for transport.

▭

THE following excerpt from the daily press seems to require further local publicity: A scientist whose whole time will be spent on investigating the causation and prevention of decay in teeth has taken up his duties as Research Fellow at Guy's Hospital Dental School, London. This is stated to be the first appointment of its kind to be made by a teaching hospital in this country. A large part of his work will be to explore the extent to which diet affects the teeth.

Diseases of the Hair

A Lecture delivered at Guy's Hospital on Monday, 6th February, 1939, by Louis Forman, Esq., M.D., M.R.C.P.

GENTLEMEN,—I am not proposing to give a complete description of the various diseases affecting the hair and scalp, but to mention those you are most likely to see in the Out-Patient Department or in private practice. Perhaps, however, it would be of interest to show you pictures of some of the rarer congenital abnormalities of the hair. Occasionally in certain families there may be absence or considerable deficiency of hair-growth noticeable at the birth of the child and persisting throughout life. Not only is the hair affected, but other epidermal appendages, the teeth and nails, may be badly developed. The condition is described under the name of congenital ectodermal defect, *i.e.*, scanty hair, few or irregular teeth, with rudimentary or absent nails. Several members of the family may show similar changes. Congenital abnormalities of this type are rarities.

Those of you who are familiar with the habits of children know that some of them take to banging their heads against their cots, and some also have a habit of actually pulling out the hair. One child who had a patch of baldness on one side of the head used to spend practically all its waking hours pulling out the hairs, looking at them, and then throwing them away. The habit can be stopped by shaving the head (so that there is no hair to pull, and by the time that the hair has regrown the child has forgotten the habit), or else one may make a tightly-fitting cap which ties under the chin.

I think that the hair-pulling habit is not confined

to children. It is very likely that many adults develop the habit, too. It can be a nervous tic, just in the same way that many people have a nervous habit of rubbing some part of the skin.

I now turn to various ringworm infections of the hair. Even those of you who do not propose to become skin specialists or to interest yourselves in dermatology must learn to know ringworm of the scalp when you see it. If you miss a case of ringworm, especially in a school, it may give rise to a great deal of trouble and not redound to your professional advantage.

Ringworm of the scalp is becoming rare. Mr. Carter Braine tells me that the number of cases treated in the Light Department here twenty years ago was 400 to 500 a year—now under 50 cases a year are treated. It has become rare as a result of better medical education, and school doctors and nurses quickly get on to an early case. Another reason for its rarity is that now it can be detected by means of a Wood's glass, even though only two or three hairs are infected. The child can than be isolated, preventing infection of others in the school. Previously one had to wait until there was an obvious area of baldness. The Woods glass is a piece of nickel-oxide glass put into the aperture of an ordinary ultra-violet lamp. It allows the shortest part of the spectrum to go through, and hairs infected with ringworm of children fluoresce green. The fungus responsible is the *Microsporon Audouini*.

Clinically, on the scalp are seen scaly patches, which are sometimes a little pink, and on which are present short stumps of hairs, greyish in colour without the sheen of normal hair. The stumps may be bent or angulated, the hair having lost its normal elasticity. Mounted in 10 per cent. liquor potassiæ and soaked for an hour, a large number of spores, crowded to form a mosaic, are seen on the surface of the hair.

Ringworm of the scalp hair may also be due to infection from a cat or dog ringworm, and may produce similar changes to the above. Such animal ringworms have a greater tendency to spread than the human type. They are more active and inflammatory, and red scaling patches will be found on the forehead, neck and elsewhere on the body. Ringworm may be contracted not only from the dog or cat, but also from larger animals, the horse and more commonly the calf. The infecting fungus is of the Trichophyton group and gives rise to an acute inflammation in and around the follicles, from which the hair has fallen. Microscopically, within the hairs are seen lengths of mycelium or rows of spores. The same change may occur in the beard region or on the neck.

When a patient comes along complaining of itching of the scalp, one should not forget the head-louse. I do not think that I see cases of infection by lice frequently in the Out-Patient Department. I suppose such cases are stopped at the Surgery or by the Registrar. About a year ago I did see a patient in private who had pediculosis of the scalp. This was a lady who was most probably infected by her maid, who had been trying on her mistress's hats. The infected hairs show little white globules, which are the eggs of the lice. These are attached to the hairs in such a way that they cannot be brushed off in the same manner as dandruff. You can slip them up and down the hair. Impetigo of the head and neck may be a secondary manifestation of pediculosis of the scalp, the streptococcus being inoculated by scratching.

Coming to more adult patients, perhaps the most common complaint, in hospital as in private practice, is of dry or brittle hair. This is more common of recent years, as a result of the universal use of beauty parlours. There is probably no female in the community who does not spend at least half an hour a week having her hair "done," and that implies having it shampooed, often with a spirit lotion, dried with a hot-air dryer, and stimulated with tonic lotions. The hair becomes abnormally dry and the hair fibres tend to split, so that the free ends are frayed out. Occasionally the condition known as trichoclasia can be demonstrated. This is the same change as that seen in the hair of a well-used nail brush. The hairs show nodes composed of spread-out fibres at points of injury, and fracture of the shaft occurs at these nodes. If it is recognised that the use of substances like peroxide of hydrogen and ammonia for bleaching, and the use of very stiff hair brushes, if the hair is a little dry, will cause these changes, you can reassure the patient and apply appropriate remedies.

Very often patients come complaining of thinning of the hair, if not actual baldness. Many cases in the medical and surgical wards, following acute illness, will show loss of hair, just in the same way as they are apt to shed the skin from the hands and feet. The growth of all epidermal structures is interfered with by any constitutional, febrile disorder. Many women two or three months after childbirth will show a considerable fall of hair. As a rule the hair regrows in the normal way, except in individuals who have a latent or inherited tendency to early loss of hair.

There is a very definite endocrine control of growth and distribution of hair. Often in women after the menopause, or the application of X-rays to the ovaries, a fall of hair is noticed. Dr. Barber has described one interesting case of a woman who had a suprarenal tumour, and whose hair on the top of the head fell out. She developed at the

same time symptoms of virilism. After the tumour was removed the hair grew again, but the tumour recurred, with the same sequence of hair-fall.

My next two illustrations are of a common condition, namely alopecia areata. This is found at all ages. It is a disease which has a definite familial tendency and is believed to be due to disturbance of the sympathetic supply to the hair of the scalp. Quite suddenly, following shock or worry, or sometimes an acute infection, the patient will notice a patch of baldness of the scalp. On examination of the scalp it will be found that the bald patch is quite smooth, not scaly, and at the periphery you will see characteristic short hairs which are known as " exclamation mark hairs "—that is to say, the stump is thick and pigmented at the free end and thin and non-pigmented at the point where it is attached to the scalp. Few other conditions of baldness show exclamation-mark hairs; they are seen, too, after epilation with X-rays or if the patient has been given thallium acetate to remove the hair. What it means is, that the particular follicle has stopped growing, started again, producing a length of normal hair, and then has " given up the ghost." The exclamation-mark hair is evidence of the activity of the alopecia areata. If the patient asks whether it will spread any more, he or she should be told that it probably will if exclamation-mark hairs are seen.

In some cases of alopecia areata the fall involves the whole of the scalp. The head is completely bald like a polished ball, and in the more serious cases there is loss of hair on the eyebrows and on the face and elsewhere, and hair loss may be complete over the body. The generalised cases of alopecia areata are almost always hopeless. However, I saw one woman of 28 who had had complete alopecia of the scalp at the age of 14 and, after trying treatment for a year or two unsuccessfully, she did nothing more. At the age of 28 the hair began to grow spontaneously. That must be very rare, and if a patient has complete alopecia areata and no regrowth takes place for three or four years, it is unlikely that it will. If sections of the scalp are taken then, the follicles will be found to be conspicuous by their absence. The follicles disappear in alopecia areata, but not as a result of previous inflammation of the scalp. In some diseases of the scalp where there is injury to the skin and the hair follicles, obvious microscopical evidence will be found of follicular inflammation. For example, in secondary syphilis, irregular patches of alopecia may be seen on the scalp, and associated with this patchy alopecia will be found pigmentation going down on to the shoulders. What has happened is that there has been a syphilitic macular eruption in the scalp, associated with an inflammatory exudate around the follicles producing a temporary inhibition of the growth of the hair. The hair usually grows again quite well with anti-syphilitic treatment.

Sometimes, following more chronic or intense inflammation of the scalp, there may be complete destruction of the skin, so that a scar is left. Thus, if there is a chronic staphylococcal infection of the hair follicles, the latter will be destroyed and replaced by a scar. Overdosage of X-rays may produce permanent baldness of the scalp. The scar is liable to become ulcerated and to undergo malignant changes.

Perhaps the most common type of thinning or loss of hair is the masculine type of alopecia. The hair falls at the vertex and on the temples. It is a type of baldness which practically is confined to males. It seems to depend on the integrity of the testicles. Some years ago, Sabouraud, the late well-known French dermatologist, made a tour of the harems of the Near East and reported that there was not one of the eunuchs he had examined showed any evidence of masculine alopecia.

The masculine type of baldness tends to run in families. It is transmitted through the females, but usually only the males show the disease. Very occasionally one comes across an abortive attempt at masculine baldness in a woman, just a thinning of the hair at the sides of the head and on the top of the head. I have come across two cases of women who showed this tendency.

I might mention a girl of 18 who had had loss of hair at the temples for two years. All her family had thin hair with a tendency to baldness. One brother, aged 30, had gone bald some years previously. I think in that instance there must have been a very strong tendency for this type of baldness to occur, so that in spite of the patient being a female, it showed itself. Another patient in whom there seemed to be rather more evidence of endocrine disorder was a woman who had loss of hair from the sides of the temples. She was a thickset woman with hypertrichosis of the chin and neck, and she had been married for ten years but had no children. This case rather suggested over-activity of the suprarenal cortex.

The worst cases of masculine alopecia are those which develop at puberty. Other men begin to lose their hair at about 25, but the loss is very slight, and they may keep a good deal of hair until they are 50. General disease, such as influenza and pneumonia, may hurry up the fall of hair.

In the case of a patient who has this tendency to baldness, local disease of the scalp may also cause fall of hair. For example, a widespread seborrhœic dermatitis of the scalp in males may cause hair-fall and regrowth may not be complete.

That brings me to the difficult point as to the relation between scurf and fall of hair. Any hairdresser will say quite confidently that our hair is full of scurf and that the scurf is the cause of the loss of hair, and he will produce a bottle of lotion which those of us with no sales-resistance will buy. A certain amount of dandruff is present in everybody's hair. The horny layer is continually being shed in various parts of the body. The amount of scale on the scalp will depend on how vigorously the hair is brushed and on how often it is washed. But no doubt scurf may represent the very mildest form of inflammation of the scalp. The amount and degree of inflammation may be so slight that there is no tenderness, swelling or oozing, but an increase in the formation of the horny layer. In some individuals it will be possible to observe the transition between this tendency to scurf and a very definite infective dermatitis of the scalp. It is quite logical that one should make every attempt to keep the skin of the scalp healthy and scurf-free. If there is inflammation it should be treated with a sulphur and tar pomade or lotion.

To sum up. Patients who have an inherited tendency to early loss of hair should keep their scalps clean with frequent shampooing and use a sulphur and tar lotion if there is any evidence of inflammation of the scalp. Attention to the general health and to any septic foci is also indicated.

Correspondence

Volunteers for a Panel of Blood Donors

To the Editor of the GAZETTE

SIR,—About two weeks ago a notice was put up in the Colonnade and Medical School asking for volunteers for a panel of Group O (4) donors. Owing to the Easter Vacation, the number that can have seen the notice has been limited, and the response so far has been small. The purpose of this letter is to bring the attention of as many students and Hospital workers as possible to the appeal, and to explain the role which it is hoped this panel will play.

The peace-time organisation for the supply of blood is not designed to cope with the demands which might arise as a result of air raids. Quite apart from any dislocation of communications, there may be, at any one time, insufficient Group O donors to supply the needs of all the hospitals, and many of the transfusions will be of an urgency which will not permit the usual methods of obtaining a donor.

Some system of stored blood is essential in any scheme for the treatment of air-raid casualties. Experience from Spain indicates that it is best to use only Group O blood, to pool it, and to store it citrated at .2-4° C., when it may be expected to keep up to 18 days.

In the event of war a national blood service will be formed to control a nation-wide panel of donors and ensure a regular supply of stored blood to the hospitals; there is an immediate necessity that each hospital should make its own arrangements for the early period before a national service starts.

It is hoped to form at Guy's a panel of donors who would each contribute a half to one pint of blood in the immediate event of a national emergency. A further panel is to be formed of those whose work would permit them to contribute the same amount each month. The blood so obtained would be pooled, stored in ampoules in the refrigerators of the Bacteriological Department, and be ready for immediate use as the occasion demanded. Volunteers are asked to give their names to Miss Arnold or Miss Clark in the Bacteriological Department any day between 12 and 12.30. They will then be given a time at which to attend to be grouped. Those who volunteered last September *are asked to attend again* in order that they may confirm their willingness to join the new panel.

The appeal for volunteers is to all students—medical, dental, massage, etc.—and *to all who work in the Hospital*. If successful, it could result in a panel of several hundreds, and provide the Hospital with a blood bank of sufficient size to enable it to carry out its functions in emergency, independent for a time of external services.

Yours, etc.,
PATRICK CLARKSON.

Guy's Hospital,
S.E.1.

Appreciation

To the Editor of the GAZETTE

SIR,—We would so much like the Musical Society to know how much their rendering of the "Messiah" was appreciated in the Hospital Chapel on Palm Sunday. They looked as if they were enjoying singing; I only hope we showed, too, by our faces that we were enjoying listening.

Our grateful thanks to them all.

Yours, etc.,
A MEMBER OF THE CONGREGATION.

The Nurses' Home,
Guy's Hospital, S.E.1.

Modern Treatment in General Practice Year Book 1939. Edited by C. P. G. WAKELEY, D.Sc., F.R.C.S. Published by the *Medical Press and Circular*. Pp. 336. *Price* 10*s*. 6*d*.

THE objects of this manual, as outlined in the Preface, are that it should "substitute for post-graduate studies" and be the means by which "the average medical man can keep himself conversant with current medicine." It is written for its "usefulness in everyday practice." To achieve these quite commendable ends there are included here some 48 essays. Physicians may feel aggrieved that only 12 are thought sufficient to make the general practitioner conversant with modern medical practice. Of the remaining 36, 28 are devoted to purely surgical problems, and eight deal with matters common both to surgery and medicine. The disproportion becomes more striking when the subject matter of the surgical sections is studied. It is difficult to see how technical accounts of the excision of eight nerve tumours, of pneumonectomy, and of splenectomy for blood dyscrazias, can be "surgery in so far as it affects the general practitioner."

Books like this can only hope for success by the most rigorously strict selection of material. This material should truly reflect the medical literature of the current year, and the emphasis must be on work which has recently been consolidated. Details of medical treatment may be included with advantage, but the technique of operations is seldom necessary. If this book be assessed by these standards its chief faults are immediately apparent. They are both of omission and commission. Those of commission have already been indicated. The chief defect is the lack of any proper account either generally or with reference to special conditions, of the use of sulphanamides. References to these drugs are found scattered throughout the text, where they are generally referred to by the archaic and proprietary term "prontosil." Even in the treatment of gonorrhœa they are given a minor place. No attempt is made to describe the mode of action, the indications, or to assess the incidence or significance of the various toxic manifestations.

The book is divided into two sections; in the first are short accounts of modern treatment, which include some points of diagnosis. Mr. Kelsey Fry's important teaching on the treatment of fracture to the mandible is included amongst these. Jaundice, pyelitis, the vesical papilloma, dysmenorrhœa and inguinal hernia are others included in this section.

The last twelve articles form a section on pitfalls, and as a group are quite the best in the book. Mr. Joll contributes a most admirably complete and concise account of the clinical diagnosis of thyroid swellings. Mr. Roberts on empyema stresses some practical points of procedure in aspiration, and includes much that is of value in the symptomatology and treatment of the condition. Mr. Mitchener in "Groin Swellings" clearly expounds the value of a drill-like routine in certain departments of surgery. Like Mr. Joll's article, it could always be read with advantage. Dr. Hugh Davies on pitfalls of chest X-rays makes many excellent points, in particular the danger of reaching conclusions from a plate which does not conform to the necessary technical standards. Of these standards he gives a concise summary. Much less satisfying is Mr. Edward's "Axillary Swellings." The diagnostic problem cannot be dismissed thus: if the glands are matted then they are pyogenic or tuberculous, if softened then tuberculous, if recent and hard then neoplastic. No mention is made of Hodgkin's disease as a cause of axillary glandular swelling, nor is any attempt, comparable to Mr. Mitchener's in the groin, made to describe non-glandular tumours. This is the more disappointing as axillary infections are a common and often neglected group of cases which present to practitioner and surgeon alike many difficulties in

treatment. It is on questions like these that practical detail is wanted. Methods of closing the main bronchus or of securing the splenic pedicle could well be sacrificed to make room for them. On breasts Mr. McNeil Love rather curiously distinguishes duct papilloma from duct carcinoma " by its clear watery discharge." He advocates a total mastectomy for it. Without reference to histology he describes both an acute carcinoma and an encephaloid carcinoma as occurring in pregnancy, although the features by which these may be distinguished remain obscure.

Many of these articles are of considerable interest, and would appear to serve adequately the function for which the editor chose them. The presence of some dealing chiefly with the technical aspects of major surgical procedures will scarcely be of benefit to a general practitioner, and their inclusion is a matter for conjecture.

One article comes into a different category. Describing the treatment of a common surgical emergency, it strongly advocates measures which any general practitioner could follow. These measures would, in the opinion of your reviewer, have disastrous effects if used as widely and as indiscriminately as the writer suggests. Mr. G. C. Knight, writing on the " Modern Treatment of Head Injuries," most vigorously advocates the use of dehydration therapy in every case. " The extent of the injury determines the amount of dehydration." Both the rectal and the intravenous routes are advocated for the administration of hypertonic solutions. Lumbar puncture is mentioned, not as a guide to the necessity or amount of dehydration, but as a very useful accessory to dehydration treatment.

The objection to dehydrants is, of course, not that they have no effect, but that they may have too great an effect. Advocacy of their general use is condemned because, as Jefferson has shown, many severe head injuries show no rise in the cerebro-spinal fluid pressure, and because the early and indiscriminate use of dehydrants may excite the onset and obscure the presence of intracranial hæmorrhage. Mr. Knight is enthusiastic, too, regarding the surgical treatment of traumatic epilepsy. Of late Jacksonian phenomena he states : " Excision of the cortical star by diathermy technique produces complete relief of Jacksonian phenomena, but with less uniformity than is the case in operations for the division of uncomplicated dural adhesions." This sentence apparently means that excision of a cortical star may completely relieve the epilepsy, but that this result will not always occur. On the other hand, epilepsy due to an uncomplicated dural adhesion (*sic*) will be relieved in 100 per cent. of cases. It would be interesting to know how many cases Mr. Knight has successfully treated in this manner and for how long they have been followed up. By the surgical treatment of traumatic epilepsy Penfield reports only 40 per cent. " relieved " ; others following him have obtained even less encouraging results.

P. W. C.

The Student's Handbook of Surgical Operations. Written by Sir FREDERICK TREVES ; revised by C. P. G. WAKELEY, D.Sc., F.R.C.S. Published by Messrs. Cassell & Co., Ltd. Sixth Edition. Pp. 563. *Price* 12*s*.

THIS is another of Mr. Wakeley's productions. It is a small book which, since it was first written in 1892, has become the students' classic on the subject. There is no other work of the same size on this subject with so reliable a reputation. The best books on operative surgery are too large for undergraduate consumption. The operative detail in the ordinary textbooks is often insufficient and, being scattered throughout the book, is relatively inaccessible. Treves and Wakeley, a book in many ways admirable, fills the gap and has played a distinct part in the surgical education of this country.

Conservatism in a book primarily intended for students is a manifest virtue, but the most striking feature of the present edition is its complete lack of modernity. The following are examples of this which have been noted.

There is no mention of periurethral prostatectomy. The Langenbeck operation for cleft palate is described at length with only a casual reference to one other method. The classical anterior, the Murphy, and the posterior approaches to the hip joint are presented in detail. The Smith Petersen attains a terminal reference of a couple of lines. Radium dosage is assessed in milligramme hours without reference to Roentgen units.

No mention is made of preganglionic sympathetic section ; the postganglionic operation of stellate ganglionectomy is given in detail. These may not be large matters in themselves, but the student should be able to turn to this book for information regarding the operations he sees performed in the theatres of to-day. One other aspect of the book which could well be improved is the illustrations ; Mr. Wakeley could learn a lot from Mr Bailey of the art of attractive display. In many of these diagrams the essential point is relatively obscure, and the proportion of old and line diagrams is too high.

The formal ligations are concisely and clearly described in the opening chapters. Similarly the other department of classical surgery, amputations, is really excellent. Messrs. Dessouter have sup-

plied most instructive photographs, in contrast to the rest of the book the matter in this section is in the first degree modern. It is a pity that the account of the modified Syme omits the all-important point that the tibia and fibula are divided one inch higher than in the classical operation.

The section on radium is too sketchy to be of any real value. No general principle emerges either for the assessment of dose or for its indications in particular cases. It is stated that treatment by radium has entirely replaced all other methods of treatment for carcinoma of the cervix uteri. So it may, in hospitals where the art of doing a Wertheim has been lost. Endocervical carcinomata are still properly best treated by operation. The author does not give us his opinion on the value or limitations of the radium in the presence of sepsis round the growth. And are radium and surgery *equally* disappointing in the treatment of osteogenic sarcoma?

The discussion on gastric carcinoma is quite unjustifiably optimistic. Operation is said to prolong life two to five years. Balfour's figures of 29 per cent. five years' survival are repeated without warning that his criteria of malignancy may be the answer to the extraordinary difference between these figures and those of all other abdominal surgeons. *Horribile dictu*, no pre-operative treatment for gastrectomy—either stomach wash-outs, oral hygiene, or transfusion—is given.

Perhaps not enough mention has been made of the virtues of the book. These are many, but in view of the position which this work occupies, it has been felt justifiable to judge it by the very highest standards. P. W. C.

Pye's Surgical Handicraft. Edited by HAMILTON BAILEY, F.R.C.S. Published by Messrs. John Wright & Sons. Eleventh Edition. Pp. 512. *Price* 21*s*.

MR. HAMILTON BAILEY is another of our surgical impressarios. The publications with which his name is associated present many features in common. Not the least of them is the excellence of production. Clear type on good paper and well-chosen profuse wash illustrations cater for the taste which he has himself done so much to educate. Mr. Bailey is always at his best when dealing with points of practical procedure. His most valuable contributions to surgical literature are in this field. "Emergency Surgery," a book which has been of immense value to younger surgeons of the last ten years, is an example of how successful his methods can be. In short, his best productions concern those aspects of surgery where his own experience is greatest.

Of this work it must immediately be said that it should serve the widest range of usefulness. It is a book in which students and house officers will find information of value on every aspect of their work. Its lively, practical, and stimulating contents will be appreciated by many practitioners.

There are many points in the mass of detail included in the book with which your reviewer is not in agreement. Before considering them he wishes to reaffirm his general opinion that the book is an excellent one, which should attain a very wide popularity, and that the not inconsiderable price, a guinea, is by no means excessive for the contents of such a book.

The 29 authors include house surgeons, sisters, pathologists, physicians and radiologists. The major contributor is the editor, who writes on the arrest of hæmorrhage, saline infusions, catheters and catheterisation, management of thyroid cases, hand infections, head injuries, resuscitation, management of upper abdominal, lower abdominal and minor genito-urinary operations. All these sections preserve a rigid standard of competency. In particular, the section on head injuries shows a ready appreciation of the houseman's difficulties. It contrasts favourably with the account already considered in a previous book.

Mr. Watson Jones has a contribution of exceptional value. In a hundred well-illustrated pages he deals with the treatment of fractures of the limbs and trunk. It is a most succinct account, embodying a clear line of principle which he has adorned with many practical tips. A brief account of first aid and of the complications of fractures is included.

Dr. Marriott's clear teaching on the treatment of acute poisoning is already widely known. Its inclusion here increases the value of the book.

Other sections of particular value are practical pathology by Dr. Close; Mr. Gabriel on the rectum and anus; the house surgeon in the X-Ray Department, and very brief accounts of gynæcological, eye, and ear, nose and throat procedures essential for the house officer.

The suggestion in the account of wounds that lacerated wounds may be well treated by immersion in $2\frac{1}{2}$ per cent. iodine is quite pernicious. This ineffective, painful and shock-producing procedure belongs to the surgical Middle Ages. It would be desirable, too, in this section to show some appreciation of the functions of antiseptics in surgery, and a recognition that such substances as biniodide of mercury, flavine, dettol, and hydrogen peroxide are not mutually interchangeable. Quite strong objection must be voiced to the directions given for washing up. They conform to the most rigid Listerian standards, but have no relation to the realities of asepsis or of

modern practice. Does the author really spend ten minutes, by an hour-glass, scrubbing before each operation—that is, about an hour every heavy operating day? Modern practice demands only three minutes, followed by a drying in spirit, and the use of sterile gloves. The longer period carries no increased security commensurate with the dermatitis and nail infections which must follow the rigid observance of the ritual described here.

The treatment of burns is adequate, but not completely satisfactory. The stage of acute toxæmia which accounts for most of the deaths receives scant consideration; there is no discussion of the question of the possible advantages of increasing the strength of tannic acid to 20 per cent. or of avoiding spirit in the cleansing of the burnt area.

Mr. Love compensates for a sketchy account of carbuncles, in which treatment by whole blood injections round the lesion is given priority, by a really excellent and detailed description of the prevention and cure of bed sores.

The illustrations in the section on varicose veins are unfortunate. The first shows a method of injection with the patient standing on a stool. Perhaps Royal Northern patients never faint, but why decrease the chances of producing adequate sclerosis by injecting when the hydrostatic pressure within the veins is at its maximum? In the second a sorbo rubber pad is being bound to an ulcer by an adhesive rubber bandage. The pad shown is about half an inch thick and has an irregular non-bevelled edge. Any good result produced on the ulcer by such a pad will be offset by the secondary breaches of the skin round the edge of so thick a non-bevelled pad. The pernicious practice of ligaturing the saphenous at "some point along its course" and then injecting the proximal as well as the distal vein, is recommended.

The account of the sulphonamides is purely frivolous, and is the only serious fault to be found with this work, which, as already stated, is, in your reviewer's opinion, a most valuable contribution to modern surgical literature.

P. W. C.

Recent Advances if Medicine. By G. E. BEAUMONT and E. C. DODDS. Published by Messrs. J. & A. Churchill, Ltd. Ninth Edition. Pp. 430. *Price* 15*s.*

THIS is the ninth edition of the first volume of the Recent Advances series, which was published first fifteen years ago. The success of the whole series, and of this volume in particular, needs little further advertisement.

As before, the value of the book lies in the descriptions given of the clinical characteristics and treatment of those conditions which in the author's view exemplify "the growing edge" of medicine, and in the very full account of clinical and laboratory investigations in diagnosis. Perhaps of most lasting value of all is the full list of references at the end of each chapter, which makes it possible to inquire further with a minimum of delay and trouble into any of the matters in the text, which may particularly interest the individual reader.

Many of the chapters have a biochemical bias, and this is particularly shown in the new chapter on the sulphanilamide drugs and in the expanded chapters on the vitamins and the sex hormones; in all of which the structural formulæ which are so liberally illustrated are likely to be of little value to the general reader. The chapter on the kidneys remains excellent, as before. There is a new arrangement of the renal function tests as applied to cases of nephritis, and it is interesting to see that the use of the organic mercurial diuretics is advised in cases with œdema where there is no nitrogen retention, hæmaturia, or raised blood-pressure.

In the chapter on diabetes, the diabetic treatment has been largely rewritten, numerous specimen diets are given, and, on the theoretical side, there is an excellent summary of the physiology of the acid-base equilibrium. A description of the new protamine insulins has been added, with a consideration of their uses and contra-indications. In the chapter on the stomach the Menlengrocht diet system and the indications for surgical intervention in hæmatemesis are dealt with in detail, whereas the recent advances in gastroscopic diagnosis are treated rather inadequately. There is a good summary of the general indications for surgery in peptic ulcer.

In the chapter on the heart the new terminology of bundle-branch block is given, and the value of the chest leads of the electrocardiograph in the diagnosis of coronary disease is discussed. The uses of salyrgan, novurit, ammonium chloride, doryl and mecholyl have been added. In the chest, the indications and methods of inducing pneumothorax are excellently done, and a method is described by which the bronchi of both lungs may be filled with lipiodol and photographed at one sitting.

The chapters on diphtheria, scarlet fever and the anæmias remain much as they were, and the book ends with a chapter on blood and urine analysis which is of the greatest use to the hospital worker.

The original design of the book has been maintained, to form a constantly changing adjunct

to the ordinary textbooks of medicine, and it does not usurp their function. It will be of great use to practitioners who have had little opportunity for recent post-graduate study, and to those studying for higher examinations in medicine, as is suggested in the authors' Preface to the first edition. But it is more difficult to maintain, as they still do, that it will be useful for candidates for the primary Fellowship.

W. D. B.

The Emotional Factor in Visceral Disease. By H. G. McGregor, M.D., M.R.C.P. Published by the Oxford University Press, London, Humphrey Milford, 1938. Pp. 198+xii. *Price* 8*s.* 6*d. nett.*

THE family doctor learns by experience much of the matter which this interesting book contains. The recently qualified man tends to regard illness from the physical rather than the psychological point of view. This book produces experimental evidence in describing the ways in which "emotional reactions" are productive of disease and collects in a small volume what has hitherto been scattered information. By appreciating the scientific principles underlying a diagnosis of "nerves" a doctor may obtain confidence in that which is so often an intuititional diagnosis and should be able to reflect that confidence in the results which he obtains with these most difficult of patients.

The work deals only with that branch of psychology known as the "emotional reaction," and considers the individual as a "psychosomatic" unity. The underlying emotional reaction is considered on simple lines in relation to the various symptom complexes. A particularly enlightening chapter on Peptic Ulceration reveals the neglect of the psychological aspect of treatment in a disease in which the type incidence has long been recognised. Sections dealing with mucous colitis, asthma, endocrines and the cardio-vascular system show how many refractory cases might be controlled.

Much care and thought has obviously been given both to the selection of matter and to the arrangement of the text and the book may be confidently recommended as a useful, though brief, review of the problems of the functional patient. Many a doctor would be a more successful general practitioner if he had read this book—granted only that his psychotherapy be applied after a thorough clinical investigation in those cases in which it is indicated.

D. E.

Practical Procedures. Edited by Sir Humphry Rolleston, Bt., G.C.V.O., K.C.B., M.D., F.R.C.P., and Alan A. Moncrieff, M.D., F.R.C.P. Published by Messrs. Eyre & Spottiswoode, Ltd., *Practitioner Handbook*, London, 1938. Pp. 293. *Price* 10*s.* 6*d.* nett.

THIS is a further addition to the series of *Practitioner Handbooks*; a collection of articles by various authors which have appeared in the *Practitioner* from time to time. The articles cover a wide field of medicine and minor surgery and are written by authorities on the various subjects; they describe technique which has been acquired by wide experience, and they make possible for the general practitioner procedures which might hitherto have been referred to the specialist. His ability to deal competently with the minor emergencies of practice should lead to a better relationship between the doctor and patient and to the improved status of the family doctor.

Sections dealing with local anæsthesia, blood pressure in relation to life assurance, catheterisation, injection treatments, modern conceptions in the administration of fluids, blood transfusions, poisoning and plaster of paris technique are chapters which should prove of immense practical value to all but the most recently qualified and serve to demonstrate the wide scope and wise selection of articles. The majority of chapters make interesting reading and even the busiest doctor will find much to repay a perusal of this volume in his leisure moments.

D. E.

Minor Medical Operations, for Senior Medical Students and Recently Qualified Practitioners. By Kenneth Harris, M.A., M.D. (Cantab.), F.R.C.P., and Edith Harris, M.B., B.S., D.P.H. Published by Messrs. H. K. Lewis & Co., Ltd., London, 1938. Pp. 198+xii with 41 Illustrations. *Price* 7*s.* 6*d. nett.*

THE authors of this small book have set out to collect from the usual medical textbooks the essential information for the proper conduct of the minor operations associated with the practice of medicine. It is disappointing that they have failed to produce a compact and reliable book of reference. They claim the work is intended for reference, and yet one frequently reads absurd detail, for example: "The small needle is attached to the syringe, which is filled with novocain and all air expelled. . . . The syringe is held in the right hand. . . ." Such detail suggests "Surgery without Fear" might be a reasonable title, but finds no justification since much essential detail is omitted.

A few points may be selected for more detailed criticism. The technique of intra-muscular injection is described, and on page 15 the importance of inserting the needle separate from the barrel of the syringe is ignored; the value of drawing the skin to one side so that a valve opening is formed is confused with the unreliable method of drawing the skin taut between the thumb and forefinger. If the needle strikes bone, the text advises that the needle should be at once withdrawn—completely? The occasional necessity of cutting down on a vein might have been mentioned (p. 18). Anaphylactic shock (p. 19) does not always occur in patients who have previously had serum in any form. Further, there are indications for the later administration of serum to patients who have suffered from serum sickness; testing of sensitisation by intra-dermal tests might have been mentioned, and desensitisation by minute intravenous injections (p. 20) suggests an heroic preliminary. In exploring a chest (p. 23) surely loculation and pus which is too thick to flow through the needle might have been mentioned as additional and not infrequent difficulties. Again, how wise is it (p. 25) to withdraw fluid from a pleural cavity until no more can be obtained? Vaccination by three or four scarifications (p. 147) is not now practised, and the Ministry recommend one scarification only.

There is no purpose in further considering such differences of opinion. The text is loosely written; for example, adrenaline is frequently recommended by intravenous route and only occasionally corrected by "Errata" slips. The book encourages confidence by detail and fails in the essentials of reliability; tempting the inexperienced to learn from his mistakes in the hard school of painful experience.

D. E.

Special or Dental Anatomy and Physiology and Dental Histology, Human and Comparative. By T. W. WIDDOWSON, L.D.S., Consulting Dental Surgeon and Lecturer in Dental Anatomy to King's College, University of London. Published by Messrs. John Bale, Sons & Curnow, Ltd., 1938. Two Volumes. Sixth Edition. Vol. I, pp. 505, with 372 Illustrations, *price* 30*s*. Vol. II, pp. 347, with 189 Illustrations, *price* 20*s*. Sold separately.

IT is a pleasure to welcome a new edition of this book, which must now be recognised as the standard English work on the subject of Dental Anatomy. The author has made the wise decision that it should now appear in two volumes.

The first volume is devoted to embryology and the normal structure of the teeth and jaws in man. There has been such a vast amount of recent research on the subject, that the author has done well to include all that is of importance, for the student will appreciate not having to search recent literature to make himself conversant with present views. Prominence is given to the work of Stones and Fish in this country, and to that of Gottlieb, Orban and many others abroad, without in any way upsetting the proper perspective of this subject. The book is illustrated by excellent micro-photographs, the majority of which are original, and serve adequately to illustrate the text. The description of the macroscopic appearances of the human teeth has been considerably improved since the last edition. The book closes with a very necessary chapter on histology—a subject to which the reviewer would prefer to have seen more space devoted.

The second volume deals exhaustively with the comparative side, which, although dwindling in popularity, still holds its place in examination syllabuses. It contains numerous illustrations, which produce a clear understanding of a somewhat tedious subject.

These two volumes can be heartily recommended to those interested. They are excellently produced, and congratulations are due not only to the author but also to the publishers for the success they have achieved in the sixth edition of this book.

F. S. W.

The Science and Art of Joint Manipulation. By JAMES MENNELL, M.A., M.D., B.C. (Cantab.). Published by Messrs. J. & A. Churchill, Ltd. Pp. 233. *Price* 18*s*.

IN this book Dr. Mennell has set out to describe a standard technique for the manipulation of each individual limb joint. The anatomy and the range of movement of each are studied in detail, and a full description of the manipulative technique follows. The dangers to be avoided and the importance of careful after-treatment are rightly stressed, and the work is freely illustrated by photographs, X-rays and diagrams, which are, however, notable for their profusion rather than for their clarity.

Unfortunately, the author has chosen to discuss not only the "art" but also the "science" of manipulation, and this section is less successful. Attention is paid only to intra-articular lesions, with particular emphasis on locking of joint surfaces and the bone-setter's "little bone out of place," while such conditions as periarticular inflammation and adhesions, and neoplasms of bone, are not discussed at all. Even "tennis

elbow" is dismissed as a muscular strain and therefore outside the scope of joint manipulation.

Few will agree with Dr. Mennell's advice on the treatment of flexion deformities of the knee, and few will hope to achieve the easy successes he claims in claw-toes, hallux rigidus and osteo-arthritis of the hip.

However, the descriptions of manipulative technique should form a useful guide to practitioners and masseuses alike, and if, in future editions, a more concise style could be adopted and repetition avoided, the defects in the present volume could be largely overcome without adding to the size of the book.

J. H. M.

Infra-red Irradiation. By WILLIAM BEAUMONT, M.R.C.S., L.R.C.P. With a Foreword by Lord HORDER, K.C.V.O. Published by Messrs. H. K. Lewis & Co., Ltd. Pp. 159. *Price* 6*s.* 6*d.*

TO many, the title Infra-red Irradiation will unfortunately convey the impression of a specialised type of electro-therapy with which none but a specialist in such matters is concerned. Dr. Beaumont, in the second edition of this popular little book, shows clearly that it is a subject of vital interest to us all, general practitioner and specialist alike, with an enormous field of application.

The book is beautifully written, concise yet explicit; the physical basis of the treatment, its physiological effects, the types of apparatus available and the technique of their use are explained; and there follows a study of the indications for the treatment, and facts and figures from Dr. Beaumont's extensive series, which range from fibrositis to psoriasis, from otitis media to neurasthenia.

The book is written for the whole medical profession, and it is to be hoped that most of them will take advantage of it.

J. H. M.

A Handbook of Midwifery. By Sir COMYNS BERKELEY, M.D., F.R.C.P., F.R.C.S., F.C.O.G. Tenth Edition. Revised. *Price* 8*s.*

THE tenth edition of this valuable handbook will be welcomed by those midwives who have known and appreciated the earlier editions, and pupil-midwives to whom it is a new book should find it helpful as a practical book of reference, both before and after the Central Midwives' Board Examination.

It contains several new illustrations; one of the most useful of these is the diagram showing the circulation of blood in the placenta.

In the chapters on hæmorrhage, this subject, usually of difficulty to pupils, is set forth clearly and concisely, and modern methods of treatment are described, together with sound reasons for their use.

There is much useful material in the book for midwives in practice, especially in the last few chapters, which deal with preparation for obstetric operations, attention to the patient in her own home, and antiseptics and methods of sterilisation. At the end of the chapter dealing with drugs in midwifery practice, is an account of hormones and their actions; and, lastly, there are a few paragraphs containing information on legal points.

Pupils and midwives will find this a very complete handbook.

M. G. S.

Dental Surgery and Pathology. By J. F. COLYER, K.B.E., LL.D., F.R.C.S., L.D.S., and EVELYN SPRAWSON, M.C., D.Sc., M.R.C.S., L.R.C.P., L.D.S. Published by Messrs. Longmans, Green & Co., London. Seventh Edition. Pp. 1,067; 979 Illustrations. *Price* 35*s.*

THE new edition of this textbook contains so many improvements that students will be well advised to abandon the former edition in its favour without delay. Certain sections of the last edition had become completely out of date and some seriously misleading. These defects have been thoroughly remedied, the whole work having been revised and many chapters completely rewritten, in particular those on radiology, the remote effects of oral sepsis, on odontomes, and on saliva. There is a new chapter on the dental aspects of radium treatment of the mouth and a large number of new illustrations. The student will observe the somewhat increased size with apprehension, but the type is large and the bulk not too formidable. The reviewer has no doubt that this is the most suitable textbook for students working for British dental qualifications, though additional books on some technical aspects of dental surgery are advisable since procedures for the repair or replacement of lost dental tissue are not included. The work can claim, however, to be more than a students' textbook; it is a summary of our knowledge and ignorance of dental pathology at the present time, and it is an expression of the attitude of dental surgeons in this country towards dental education and the relation of dentistry to other branches of medicine. Those practitioners whose chief interest lies in the technical aspects of dental surgery will find that these aspects are overshadowed by considerations of pathology and diagnosis, though in some sections, such as those on orthodontics, the removal of teeth, and local anæsthesia, they receive full attention. To the

practitioner, however, the principal value of such a book is that it provides a convenient summary of the recent knowledge and opinion on all dental matters within the limits mentioned, and in addition forms an excellent reference book when unusual cases are encountered.

A Textbook of Medicine. Edited by J. J. CONYBEARE. Published by Messrs. E. & S. Livingstone. Fourth Edition. *Price* 21*s. nett.*

THE fourth edition of this justly popular book fully maintains the high standard set by previous editions. Conybeare's "Medicine" is, in fact, remarkable among textbooks of medicine for its straightforward, lucid style, the carefully prepared sequence in which its parts follow one another, making it exceptionally easy to read, and its simplicity—the latter despite the fact that it is very complete.

This new edition has some one hundred and fifteen pages more than its predecessor—a small number when the amount of new material in the book is considered. This is due to the careful editing.

A main addition is the section on Psychological Medicine, which is a very clear account of the more common types of mental affliction likely to be encountered by the general physician. It is enough, also, for the average examination in general medicine of whatever standard. After reading it the student may justly feel that he has a good understanding of the more outstanding facts in psychiatry, a subject in which it is notoriously difficult to build a secure basis of sound knowledge.

The introduction to this section is, indeed, a masterly dissertation on the varying aspects of psychology in health and disease and on the interplay of physical and mental factors on the health of the human organism. It would be hard to find a treatise on psychological medicine that is based on such sound philosophy, that is so unbiassed and so clear in argument. One feels that were more of medicine taught in a vein so rational, the trees would become less bewildering and the wood seem a little clearer to the student's eye. The subject is reasoned from first principles along logical lines and is delightfully free from the prejudices and flights of imagination that beset this, perhaps even more than any other subject in medicine. The section ends with a practical account of the ways of certification, not neglecting the private patient.

The bearing this book has in all its parts on the practical side of medicine is, in fact, its most outstanding feature. It is a book for the practitioner as well as the student revising for his final examination. The busy man may with confidence turn to it for reference and quickly find a clear account of the subject with all the information he will need in the everyday conduct of his practice. In this the fourth edition maintains the tradition of the previous issues. May it long continue to do so.

Perhaps the index might have been a little fuller. The point is a small one, for the index is good, but for the student revising for an examination nothing is pleasanter than to find an index overflowing with what might appear to be irrelevant matter so that the task of reference is made doubly simple for his overtaxed brain.

Other new subject matter is an article on lymphogranuloma inguinale and articles on the heart in myxœdema and deficiency diseases and on peripheral circulatory failure. There are several new paragraphs in the neurological section and some new X-ray plates have been added.

A pleasant feature is to find that the more modern therapeutic measures are discussed intelligently, bringing the book up to the present and acquainting the student with the practical use of the more generally important modern methods. This is always a matter of difficulty in a textbook, and has given rise to the criticism that textbooks are usually ten years behind the times—a criticism out of place in connection with this edition. Sulphonamide and zinc protamine insulin are given their just place, and the more debateable points in therapy such as the Meulengracht diets in hæmatemesis, are shortly but critically discussed.

The chapter on nephritis maintains the high standard it reached in previous editions, and is really a brilliant summing up of present-day knowledge on this branch of medicine. It leaves the reader with a feeling that here is really all he can safely know at the present time about the handling of this disease in practice.

The sections on dermatology and infectious fevers are also admirably practical and very readable, and it is noteworthy that the latter contains one of the few tables of incubation periods that are easy—one might say possible—to remember. It is encouraging in these days of pigeon-hole medicine to find that tuberculosis of the skin is is included under the heading of the disease as a whole, thus emphasising that the disease process is an entity and the human body a complete organism struggling against its environment, nor merely a loose collection of anatomical parts. Here the signs so readily to be seen in the skin are placed before the student as the signs of an underlying systemic pathology, and are not left to be considered as symbols of disease processes foreign to

the wider field of general medicine; processes to be memorised by those who have the energy to reach the end of the book. This is an instance of the tribute that is to be paid to the editor for the logical way in which this admirable book is presented and an expression of the philosophy that underlies the whole. His hand can be seen throughout its pages, giving it its conciseness, making its sequence so easy to follow, and producing a work that is valuable for life as well as a first-class textbook for the examinee.

It is indeed a book that any student would be well advised to buy and keep beside him after he is qualified as a foundation stone of sound, practical medicine.

B. W. H.

A Textbook of Biochemistry. By H. T. CAMERON, M.A., D.Sc., F.I.C., F.R.S.(C.). Published by Messrs. J. & A. Churchill, Ltd. Fifth Edition. Pp. 414. *Price* 15*s*.

IN this, the fifth edition of Prof. Cameron's book, there has been a considerable rearrangement of the subject matter under new chapter headings, while the book has been brought up to date, as far as is possible in so rapidly advancing a subject, by the inclusion of the results of much recent research.

In its 400 pages are contained, in addition to a vast number of the facts of general biochemistry, chapters on more specialised subjects, including physical chemistry, immuno-chemistry and pharmacology, so that of necessity the treatment of all subjects is very compressed. This has resulted in a book most of which is concerned with the rather bald statement of facts and theories, and in which there is too little of the description of experimental methods and of illustrative examples which make a book more attractive to the reader. The chapter on physical chemistry, for instance, would have been more digestible if a few applications of the rather formidable conceptions contained in it had been mentioned.

The rapid advance in our knowledge of the nature of many of the vitamins and hormones is reflected in the remarkable change in the appearance of the chapters on these subjects, which are now replete with photographs of crystals and with structural formulæ.

There is an excellent section on the chemistry and metabolism of the carbohydrates, lipides and proteins, which is, however, rather overburdened from the medical student's point of view with pure organic chemistry. This section includes an interesting account of the use of heavy hydrogen in the investigation of lipide metabolism and a fairly extended account of protein structure, which makes no mention of X-ray investigation or of the cyclol theory.

The book also contains chapters on the respiratory function of the blood, the mechanisms of cellular respiration, and on metabolism measurements and the principles of dietetics.

There is far more material in this book than is required for a qualifying examination, but much that will be of value to anyone who wants to build a solid foundation for his medical knowledge.

S. J. H.

Organic and Bio-Chemistry. By R. H. A. PLIMMER, D.Sc. Published by Messrs. Longmans, Green & Co., Ltd. Sixth Edition, 1938. Pp. 623. *Price* 21*s*.

THIS book occupies a little under 600 pages. It summarises the theory of elementary organic and physiological chemistry and includes practical exercises. Presumably it is intended as a theoretical and practical textbook in these subjects for the medical student.

About two-thirds of the book is concerned with pure organic chemistry. This, though condensed, is adequately summarised. But, as throughout the book, authorities are rarely cited and no bibliography is given.

The other third is occupied with "bio-chemistry." It includes chapters on the proteins, milk, enzymes, digestion, the blood, respiratory exchange and urine, among others. This part is dull and inadequate. Though the organic chemistry is sufficient and the usual practical work is described there is little description of bio-chemical processes. Examine, for instance, the sections describing carbohydrates and their metabolism. There is a good account of the chemistry and methods of estimation of the mono-, di- and poly-saccharides. The pyranose and furanose structures of hexoses are described. But the absorption and oxidation of carbohydrates in the animal organism are barely mentioned. Nothing is said of blood sugar curves following carbohydrate ingestion. Of insulin we are only informed that "it is absent from the pancreas in diabetes and appears to be a complex polypeptide." There is no mention of the carbohydrate cycle and the hormonal control of the blood-sugar level. (Yet surely the medical student is meant to learn how to treat diabetes intelligently.)

This deficiency in the description of bio-chemical processes is evident elsewhere. There is scant mention of the metabolism of proteins or fats. Hormones are scarcely touched upon. A few of the main properties of those fascinating substances, enzymes, are summarised dully. In the section dealing with the carriage of oxygen and

carbon dioxide in the blood, no dissociation curves are given. This renders the rest of the text meaningless. The buffering power of the blood, acidosis and alkalosis go unnoted. One page is devoted to a very inadequate treatment of the vitamins. (Four pages are devoted to the chemistry of the terpenes.)

Biochemistry is a young and growing subject destined to bear more and more upon medicine. For the medical student its importance lies in that it analyses the chemistry of physiological processes. A summary of chemical facts, simple practical experiments and methods of estimation means little unless it is related to physiological processes. Failure to do this in the opinion of the reviewer is the weakness of Professor Plimmer's book. It is doubtful if any author could deal adequately with theoretical and practical organic and biochemistry in a single book of 600 pages. Professor Plimmer has, however, enclosed much information in a relatively small space.

E. B. R.

Tumbling in the Hay. By OLIVER ST. JOHN GOGARTY. Published by Messrs. Constable & Co., Ltd. Pp. 326. *Price* 10*s.*

TO anyone who can appreciate strong meats this book contains food for laughter and for thought. It can be read through from cover to cover, or it can be picked up and put down again after reading a chapter or two. It is therefore just the thing for the harassed doctor, who will get the best out of the humour from his knowledge of anatomy—or his want of it—and the memory of his own emotions during the period in which he was sitting for examinations. Perhaps that is why one liked it better than Dr. Gogarty's former book, " As I was going down Sackville Street," although this has been more highly praised by the critics. As the earlier work deals with the literary coteries of Dublin and the founders of the Sein Fein movement, its allusions may be better known to the reviewers than those arising from the functions of the lingual and the long pudendal nerves.

In the early nineties of the last century, there was an examination for the Conjoint Diploma known as Elementary Anatomy, which dealt with the bones, muscles and joints of the human body. We kept it, at Guy's, as a school examination, up to the outbreak of the Great War. At 9 a.m., on the first Tuesday of October, in the year 1901, sitting in the Anatomical Theatre of the old School buildings, the only existing evidence of which is the short trees between Nuffield House and the starlings' rest, I heard the late Mr. John Dunn recount the following story, designed to impress upon us the need for being industrious students.

He told how, examining in the old Bones examination for the Conjoint Board some ten years previously, he had met a student who did not know much; and he asked him first about one bone and then about another without being able to elicit any response. Finally he said to the candidate: " Well, my dear, pick up any bone from the table that you like and tell me any point about it that you know." And the student answered him and said: " Well, sir, to tell you the truth I thought the examination was to-morrow ! " In the year 1909 Mr. Dunn, returning from an examining expedition to Edinburgh, with a beam upon his face more expansive than usual, took the Surgical Registrar by the buttonhole of his coat and said: " You know, my dear, that story that I used to tell you boys of the candidate who thought the examination was to-morrow? Well, they told it me in Edinburgh as having happened up there the other month, and I said to them: ' My dears, that's my story. It happened to me in 1892. Seventeen years is about the time it takes for a story to travel to Edinburgh and to get into a Scotsman's head.' " Thirty more years have passed and the story has reached Dublin, and is duly set forth by Dr. Gogarty. Not that it is told in the bald way of a Scotsman or a Southern Englander. It is slipped in at the end of a saga of the cycle track as an example of the iniquity of the system of Internal examiners, from which, thank Heaven, we are free in London. And the story of the cycle track is one that makes an ageing pedestrian who has never done more than push a roadster up Brixton Hill become as excited as he does at reading Kipling's " Maltese Cat " without ever having seen a game of polo since, at the age of six, his father took him to the Lees at Folkestone when the family was in seaside lodgings at Sandgate. There is art in telling a story thus. Of course it is possible that the traditional Irishman, Scotchman and Englishman may each have made the same gaff, but it seems much more likely that the story has travelled around the capitals acquiring merit as it went and becoming attributed to an individual in each just as one suspects that in fifty years' time Messrs. H—— C—— or F—— C—— will be remembered by the story of the elephant with placenta prævia, which has recently reached London and is still in the stage of elaboration therein.

The newly qualified may be well advised to study how Dr. Gogarty plays with the publican's wind, and to learn therefrom how in the art of therapeutics it is not the amount of knowledge that matters, but the power of using it, and that

the elementary principles of chemistry and physics known to the first-year student may be as efficient in the treatment of flatulence as all the radiography and achlorhydria of the examination candidate. But it is the pharmacist who assessed the true nature of the case when he gave the boys some proprietary pills to give to the patient :—

> " Here they are," said Paddy. ". . . They are a patent founded on peppermint. If they don't make him worse they'll leave him as he is, and that's what he wants. It's the worse turn you ever did to take a disease away from a fellow, provided it keeps him occupied and takes his mind off himself. There's some people who have nothing else left to live for but their own death. Give him no more than a dozen at a time. You'll find that he'll give most of them away doing good to others."

Into his humour Dr. Gogarty entwines much that is beautiful and good, though it must be admitted that he also incorporates much that is dirty. After these riotous chapters there ensue a number in a higher mood. For his devotion to one whom he calls the Benign Doctor, to the Master and to the Vice-Provost one will forgive him much, even the hurling of empty beer bottles into the hedge which—considering they were worth tuppence each—causes one's horror at the waste to join hands with one's indignation as a sanitarian ; but the scene is forced, being apparently designed to conjure up a little noisy noise within the hedge :—

> " A light breeze coming with the first rareness of the night caused a movement in the great hedge, which was accompanied by a tinkling sound like that made by a lustre on the mantelpiece when the housemaid is dusting and you are trying to read."

His reverence for his seniors, other than his teacher of anatomy, does not, however, allow us to forgive him for his story of members of the legal profession. A despicable solicitor had robbed an old woman of five hundred pounds and was being sued by her for it, and this is made the excuse for three chapters about him, a recorder, and two barristers which ends by the solicitor speaking of the others thus :—

> " I'd rather be a whore any day of the week than one of those barristers ; a whore sells her body, but a barrister sells his bloody mind to the highest bidder. A whore can call her soul her own."

There may be certain despicable members of the legal profession as there are in the medical, it may be right and proper to tell stories which are meant to be funny about their objectionable propensities, but a member of either profession should limit humour of this type to his own profession. Dr. Cronin has recently done it for the medical profession, and many are righteously indignant for it. But there is nothing about doctors in Cronin's book so unpleasant as what Dr. Gogarty writes of lawyers. We should apologise to them for it.

The last four chapters may be considered as being exuberant in their humour. They are a description of a night in which is celebrated a post-qualification binge—a binge that would be unthinkable in London. But Jenny, the little acrobat who could stand on her head in a café at dawn among the crockery containing coffee, tripe and onions, and skate's roe, wearing nether garments that would be short even for to-day, is rather attractive. One feels it would have been batter had Giddy Ouseley, the hero of the book, not told a lady whom he had met earlier in the night that he was a B.A., T.C.D. It was not a compliment to those who have taken an arts as well as a medical degree.

T. B. L.

British Medical Societies. Edited by Sir D'ARCY POWER, K.B.E., F.R.C.S. Published by Messrs. Baillière, Tindall & Cox, Ltd., London, 1939. Pp. 312+xvi, with 48 Plates. *Price* 10*s.* 6*d.*

THIS is a pleasant and useful book for any doctor to have upon his shelves. It is also a valuable work of reference to those who may wish to know something about the side-lines of the history of medical activities in this country during the last two hundred years. It consists of a series of articles that appeared in the *Medical Press and Circular* in the last three years. Most of the societies with which it deals are clinical ones, several of which are students' societies, of which the Royal Medical Society of Edinbrugh takes pride of place having now been in existence for over 200 years. Next comes our own Physical, which is not quite in the same position as it only became a pupils' society in 1830. In fact, as a gathering of students the Middlesex Hospital Medical Society takes place of seniority in London, dating from 1774. We, however, can claim to have the oldest society in London, for the present Physical Society is just as much a part of the Physical Society founded in 1771 as the Abernethian Society at St. Bartholomew's is of the medical and Philosophical Society founded at that hospital in 1795. The doyen of our consulting staff, Sir William Hale-White, writes about it with his accustomed charm. Reading about the other societies, one realises how things change and how they must do. Thus the Anatomical Society was founded by Mr. C. B. Lockwood, a surgeon at St. Bartholomew's, and in its early history as described by

Prof. Barclay-Smith the names of practising surgeons are often found. Of recent years this has not been so, and our Mr. A. R. Thompson has practically been the only one to take part in its meetings. This is a pity, for structure must remain the foundation of a surgeon's work, and it would be well if we went back to it. Of much interest again is Mr. Vernon Cargill's story of the Ophthalmological Society, which brings out the fact that this branch of surgery has produced during the last fifty years more men of distinction in pure science than any other, while as a specialty it remains the first in position as it is in time.

If we were to dip into the names of distinguished members of our profession that occur in this book we should never end, except by making lists as Mr. Willoughby Lyle has done in his account of the Listerian Society of King's College Hospital. It is a pity that he did not make it an occasion to collect memories of the great man after whom it is named from those men and women who remember him. Perhaps some King's man—or woman—will do it yet. They are a dwindling number, but even after all these years the eyes of all of them still light up when they speak of him. It is one thing to be written of with enthusiasm in an obituary notice; it is quite another to make a face still glow a quarter of a century later—perhaps fifty years after the contact that inspired the junior. It may be that that is Lister's greatest claim to fame, and that in it lies the secret of his success.

Two of these societies are different from the rest in that they are mainly administrative. These are the British Medical Association and the Society of Apothecaires. Every student knows about the former, but of the latter, the oldest of all, there is to-day, great ignorance, which Mr. Cecil Wall's account may help to lift. Its very name of "The Worshipful Society of Apothecaries" is redolent of history. The word worshipful shows its connection with the London of old days, when the direction of all its life was in the City. But the word Society shows its difference from the other craft guilds which were, and are, all Companies. The way this arose was in this wise. It was a time when certain of the Grocers began to specialise in comestibles imported not for the delectation of the palate such as pepper, but for the treatment of disorders such as jalap. They began not only to sell but also to advise as to their use. When they applied to become a body distinct from their parent the Grocers the King (James I) took a great interest in them. He instructed Sir Francis Bacon to draft their Charter, he gave them the Scottish Royal animal, the Unicorn, as their supporters, and he invested them with the name of a Society as an indication that their activities were of a professional as well as a commercial nature. And so the storekeeper became the general practitioner, and so he remained until 1858, when the Medical Registration Act fused the physician, the surgeon and the apothecary into one—the medical man, with a common basis of knowledge and interest, and a common responsibility.

But it was the Society of Apothecaries that did more than any other body to make this Act possible, for in the early years of the century it was they who had sponsored the Act of 1815 which, in Dr. Wall's words, "was the first time the legislature had attempted to regulate the medical profession since the Act of 1521 which confirmed the Royal Charter of the College of Physicians." And under this Act they became the pioneers of modern medical education.

"The educational theory of the period held that an examination test was amply sufficient to guarantee professional competence. The Apothecaries thought otherwise, and insisted from the first upon the production of evidence of adequate instruction before the admission of candidates to examination. Hitherto there had not been any incentive for teachers to organise courses of instruction in medicine; henceforth there was a definite demand."

T. B. L.

Schafer's Essentials of Histology. Edited by H. M. CARLETON. Published by Messrs. Longmans, Green & Co., Ltd. Fourteenth Edition. Pp. 575+xxix. *Price* 16*s*.

"SCHAFER'S Essentials of Histology" requires no introduction. This well-known and time-honoured book has now been revised and brought up to date by H. M. Carleton. While not presuming to be a comprehensive book of reference, its contents are much fuller than the title would suggest. Besides the matter which may be considered essential for the student of histology, there is a wealth of well-chosen recent work with important applications in pathology, which makes the book particularly attractive to the medical student, who is but a passer-by in this subject. The knowledge gained by modern methods of tissue culture has served to make histology a more dynamic subject. Tissue culture has enabled one to study the living cell throughout its life history and the knowledge thus gained should add to the greater understanding of pathological processes, with which the medical student is more closely concerned.

Most sections of the book are good, while many, including those on the nerves and blood vessels, are excellent. The use of good photo-micrographs

where possible is a considerable improvement, as it familiarises the student with actual appearance and allays his suspicions of "faking." Elaborate diagrams tend to make the student dissatisfied with his own preparations, causing him to neglect them and doubt the sincerity of his teachers. On the other hand, there is no excuse for the reproduction of bad photographs such as that of the liver (p. 380) or kidney (p. 399).

Another criticism may be made and that is the description and use of the Metz hæmocytometer eye-piece for the enumeration of blood cells rather than the more universally used ruled slide chambers. Future editions might well rectify this omission.

It seems a pity that the editor who quotes numerous reputable authorities in the text does not give a list of references at the end of each chapter. Most textbooks of histology devote a disproportionate space to the histology of the central nervous system, and this book is no exception. Neurological histology is now a highly specialised field which requires methods of examination outside the range of the student, so that it is difficult to interest him from p. 446 to p. 531.

On the whole, the editor and publishers are to be congratulated on producing such a worthy heir to "Schafer's Essentials of Histology" at the very reasonable price of sixteen shillings.

S. J. de N.

Midwifery. By TEN TEACHERS. Published by Messrs. Edward Arnold & Co., Ltd. Sixth Edition. Pp. 676+vii. *Price* 18*s*.

TO write a good textbook is surely not the easiest task for one man. For ten to combine to write a textbook of midwifery would seem the almost impossible, and the editors are to be congratulated on their success in producing such a readable whole from the combined efforts of the contributors.

As has been truly said, however, no two intelligent persons can agree entirely between themselves, and the compromise involved in the experiment of the ten shows itself occasionally in the book—for example, in the multitude of treatments advocated for eclampsia. Here we find recommended, in addition to sedatives, the use of stomach and colon lavage, intravenous drips, purgation, rectal glucose and soda bicarb. (in amounts which would be sufficient to produce alkalosis), and finally, injections of veratrone (which lowers the blood pressure only by poisoning the myocardium). Such complexity tends to confuse the issue, and helps neither a doctor who may be in charge of a case nor an examinee confronted with the question, "What would *you* do?"

The chapter on the artificial feeding of infants is likewise too involved. The general principles are submerged beneath a mass of formulæ for milk mixtures which are too complicated for the average woman to prepare and for the average doctor to remember.

Deficiencies such as these are all the more noticeable owing to the high standard of the rest of the book. The very thorough discussion of pyelitis of pregnancy is particularly noteworthy. Other excellent chapters are those on breast feeding and on the toxæmias, though the latter would be improved by specimen diet tables. The modern work on the endocrine basis of the toxæmias also deserves a short account.

The appearance of a sixth edition of "Ten Teachers" is evidence of its deserved and continued popularity. It should find a worthy place on the bookshelf of every medical man, the more so on account of its very reasonable price.

W. W. G.

Dysmenorrhœa—Its Ætiology, Pathology and Treatment. By A. A. DAVIS, Ch.M., F.R.C.S. Published by Oxford University Press. Pp. 254. *Price* 12*s*. 6*d*.

THE subject is discussed very fully, particularly from the viewpoint of spasmodic dysmenorrhœa. The book is well written and illustrated and contains an excellent bibliography.

All the theories on causation are discussed, most prominence being given to the neuropathic theory, with which the author appears to agree.

This part is open to the grave objection that most of the work quoted is far from being universally accepted. The large body of opinion is unable to accept the suggestion of a neuritis in the sympathetic system, and most of the histological work is felt to have been inadequately controlled.

The idea of abnormal impulses generated in the sympathetic causing irregular spasm is attractive, but the only experimental work that supports this is that extirpation of the presacral nerve relieves many cases. This, however, need mean no more than that pain-sensation is carried by that nerve. Most investigators, in fact, feel that the sympathetic does little more than preserve normal tone.

With regard to treatment, the same tendency to lead up to the sympathetic and surgery is in evidence. Endocrine therapy is dismissed in three pages, as opposed to twenty-five devoted to surgery. Œstrin in particular is stated to be rarely of value. This is far from being our own experience.

It is true that stress is laid on the need for careful selection of cases, and on the small number suitable for neurectomy, but we are not told on what criteria to make the selection.

Altogether an interesting book, of more value to the specialist than to the practitioner, but somewhat spoilt by too great stress on work which still remains *sub judice*.

H. A. H.

Surgeons All. By HARVEY GRAHAM, with a Foreword by Oliver St. John Gogarty. Published by Messrs. Rich & Cowan, Ltd., London. *Price* 18*s*.

WHO is Harvey Graham? Evidently a man of medical knowledge and wide medical reading, and probably yet another member of the profession writing under a pseudonym. In the foreword Dr. Gogarty describes the book as the best book on surgery he has ever read, and using the word surgery in its widest sense one would have great difficulty in disagreeing with him. The author states that the book is not a history book, but I would rather say it is not an ordinary history book—it is that rare phenomenon, an interesting history book.

The reader is treated to an account of the development of surgery from the Neolithic Age, through the Egyptian, Greek and Roman Empires, through the Middle Ages, to the present day. There is not a single dull chapter, for the author writes delightfully, has a magnificent sense of humour, and is all the time weaving interesting stories about his characters and their times.

It was only in the final chapters that I was disappointed, but perhaps that was because I was disappointed that such a delightful book had to end at all. However, when the second edition appears I should like to see the chapters devoted to the post-Listerian era expanded. Surely such a versatile author could find in those times sufficient material to produce a narrative as interesting as the one he has produced about the pre-Listerian ages.

S. H. W.

Treatment by Manipulation in General and Consulting Practice. By A. G. TIMBRELL FISHER. Published by Messrs. H. K. Lewis & Co., Ltd., London. *Price* 12*s*. 6*d*.

THIS book is the third edition of the author's well-known "Manipulative Surgery," and as such needs no recommendation. In this edition the author takes the opportunity of including a special chapter on "The Cult of Osteopathy," clearly differentiating it from the art of manipulative surgery; he succeeds admirably in damning the former and putting the latter on a sound physiological and pathological basis.

The fundamental principles of diagnosis and treatment in manipulative surgery are well expounded and there follow detailed accounts of manipulations of the individual joints. A final chapter is devoted to the dangers of manipulation in unsuitable cases. It is made abundantly clear that modern manipulative surgery is an art which requires much experience and practice if its standards are to be maintained at a level appropriate to the profession. Yet what of the title of this monograph? Now that manipulative surgery has been rescued from the realms of "quackdom," surely the general practitioner should not be encouraged to practise an art in which he can never, from his limited experience, hope to achieve a measure of success.

S. H. W.

Fractures and Dislocations in General Practice. By JOHN HOSFORD, M.S., F.R.C.S. Published by Messrs. Lewis & Co., Ltd., London. "General Practice" Series. *Price* 12*s*. 6*d*.

THIS book is written for the "general practitioner who has occasion to treat fractures from time to time" and for "undergraduates working for their final examination." It attempts to give more practical details than appeal in the ordinary textbooks of surgery, yet not to be a complete treatise on the subject.

There is little to criticise in the subject matter. The preliminary chapters on general principles are good. For the individual fractures and dislocations the author describes for the most part the one method of treatment which, presumably, he has found most efficient. This is probably a good feature for the undergraduate, but it is unfortunate if a particular method differs from the one he has seen carried out in his own teaching school. However, the book gives a better account of its subject than appears in most standard textbooks of surgery, and is adequate for the student reading for a qualifying examination.

There is a world of difference, however, between the knowledge required to pass an examination and the experience required for the practical treatment of fractures. For the latter one should surely study and practise the pros and cons of alternative methods of treatment if the desired results are to be obtained. In its aim to fill this role the book fails. It does not discuss the alternative methods of treatment, and it would be difficult to imagine that a general practitioner, armed only with the knowledge supplied in this book, could treat fractures successfully.

S. H. W.

Modern Anæsthetic Practice. Edited by Sir HUMPHRY ROLLESTON, Bt. Published by Messrs. Eyre & Spottiswoode. Pp. 230. *Price* 10*s.* 6*d.*

TEN shillings and sixpence spent on this book both by the student and by the general practitioner who gives anæsthetics as part of his daily routine of work would be money well spent.

For the student beginning his studies in anæsthesia all the essential details of the art of induction and maintenance are put forward in simple language, while for the practitioner the more difficult types of anæsthesia are very well described in full.

In such an excellent book it is a pity to see that so little is made of ether convulsions, a condition which appeared to occur in about 1 in 1,000 cases of emergency anæsthetics. The great use of chloroform in Scotland to-day is a myth—as a student in Scotland I never once saw a chloroform anæsthesia.

In a series of good articles I feel I must make special mention of the articles on nitrous oxide anæsthesia and anæsthesia in dentistry, both of which show an extensive practical knowledge of the subjects.

A. B.

A Textbook of Orthopædic Nursing. By EVELYN PEARCE. Published by Messrs. Faber & Faber, Ltd. *Price* 7*s.* 6*d.*

THE second edition of this book makes a very welcome addition to the literature for nurses. It is considerably larger than the first edition published in 1927.

Orthopædic nursing is specialised nursing, and although some is to be met with in a general hospital, it is difficult to include much special teaching of this work in the curriculum of general training. The book should prove very helpful, both to nurses in general hospitals and to those working in orthopædic hospitals.

It opens with useful hints on the applied anatomy. Following this are chapters on congenital deformities and deformities of the feet. Acute anterior poliomyelitis is dealt with comprehensively in chapter four, finishing with a useful summary of the principles employed.

At the end of the book is a section of practical value dealing with the application of splints, extensions, plasters and other appliances.

A strong feature of the book is the large number of illustrations and diagrams which are so necessary for the understanding of this work. The X-ray photographs are particularly good.

F. T.

Sister in Charge. By H. L. MONTGOMERIE. Published by Messrs. Chapman & Hall, Ltd. Pp. 324. *Price* 7*s.* 6*d.*

THIS is a new novel by the author of "Through a Ward Window." It is entertaining reading and easy to pick up at odd times. It shows an intelligent and fairly accurate insight into what is commonly called the humdrum of hospital life. It is interesting to follow the lives of the patients in "Mercy Ward," rather than to hear of them merely as cases. Each is a tragedy of its own—or seems to be.

Everything, be it a major operation or a mistake on the part of a nurse, turns out well; so that towards the end of the book the dramatic parts do not hold one as they are intended to, since one knows what will be the outcome. In this the story is unfortunately not so true to life as in its other aspects, and, after reading it, one is left wondering if the author has worked in a hospital, or is it written from the patient's point of view? But to all those who are intimately connected with hospital life, "Sister in Charge" should be enjoyed.

N. J. J.

Sport

Rugby

Guy's v. Old Cranleighans

(*At Honor Oak Park on Saturday, April* 1*st*)

GUY'S played their last match of the season and beat the Old Boys by a placed goal, a dropped goal, a penalty goal and 2 tries (18 points) to a placed goal and 2 tries (11 points).

It was a splendid achievement to defeat the visitors by such a comfortable margin, as the Old Cranleighans had won fourteen of their last sixteen matches, and the week before they had beaten the Hospital Cup-holders, St. Mary's.

Sound team work and good backing up enabled Guy's to reproduce the form shown earlier in the year. As Sanders was engaged in an "A" Team Cup Final, D. W. C. Charlton made his first appearance at full-back and gave a most promising display. He did everything that was asked of him, and there is no doubt that more will be heard of him next year.

The forwards were excellent and once again

Osmond's clever hooking enabled Guy's to obtain far more of the ball than their opponents.

All the backs were in good form and were always dangerous whenever they had the ball.

Alan Key, the Cranleighans scrum half, was not quite so elusive as usual, and after he had scored one delightful try on his own, found the close attention of Kolesar and Fletcher too much for him.

Putting plenty of vim and vigour into their work, the Hospital forwards held the upper hand from the start and opened up the game with long passes, which proved very successful.

At the end of five minutes Kynaston burst through the centre and passed to Babrow, who scored an unconverted try. A little later Camp scored a fine try after a brilliant run on the right wing, and Kynaston added the goal points.

Then the Old Boys found a footing in the Hospital's 25, and Key slipped away from a scrum and, having given three dummies in succession, was over the line in a flash. Although the charge was disallowed, Suter failed to convert.

The Hospital's next try came through the opportunism of Charlton. Fielding the ball well in his own half, he was quick off the mark and, after a splendid run up the middle, gave a scoring pass to Babrow, but to everybody's surprise Babrow decided to drop a splendid goal in preference to scoring a try.

Near the interval Guy's went further ahead when Kynaston kicked a penalty goal and soon after half-time Hartley scored a really clever try following a long run by Van Steytler.

After this reverse, the Cranleighans began to exert themselves, and Key did his utmost to open up the game, but got very little support from behind.

However, after a shot at a dropped goal, Watson managed to force his way over near the posts for an unconverted try, and in the last minute Lambert made an opening for Lamb who crossed for a try, and Suter added the goal points.

Team.—D. W. C. Charlton; J. L. G. Hartley, L. Babrow (captain), R. U. F. Kynaston, R. F. Camp; J. van A. Steytler, C. Halamandres; D. N. Fuller, H. F. Osmond, C. C. Vidot, J. C. Bulstrode, A. Forbes, P. Fletcher, D. P. Finnegan, P. D'O. Kolesar.

Junior Cup Final—Guy's v. St. Mary's

(At Chislehurst on Saturday, April 1st)

THE "A" XV were defeated by St. Mary's by 2 goals and a try to a try in a game which was remarkably good for a Cup game. Even the most partisan Guy's supporter could not turn this into a hard-luck story, since fifteen good individual players were beaten by a team. This is perhaps unfair to the Guy's pack, which dominated affairs in the early stages; but even then the end of the game found the weaknesses of all but a few of the forwards, and the better training of St. Mary's began to tell.

The game was distinguished by the inability of the Hospital to get the ball out to the wings, and the comparative smoothness of the St. Mary's passing. Crawford made excellent use of the single chance he received in the whole game, making 35 yards before he was hurled into touch, while Douglas was probably about the best back on the field, since he had fewer opportunities than the clever halves, Mackintosh and Moore. He actually scored a fine orthodox try. Birks cut through, Breen Turner made a lot of ground and gave Douglas just enough room to get in from about twenty yards.

This try came fourteen minutes after the start, after an even period which was distinguished by the good heeling of Guy's from the right. MacVicar appeared to be feeling his damaged thigh again, and his passing was rather erratic, though he improved as the depredations of the opposing wing forwards were curbed by three free kicks in quick succession, but poor use was made of these kicks through. Gartrell was having a lot of difficulty in getting his backs going, in contrast to Moore, who was taking his partner's rather more accurate service very smoothly, and then from a scrum just inside the Guy's 25 Mackintosh did a clever steal-away close to the scrum inside the open side forward and, deceiving Sanders with a brilliant change of direction and dummy, scored just outside the posts, and St. Mary's took the lead when Jones duly converted.

There was no further score before half-time, though on one occasion only a very fine tackle by Douglas saved Guy's when St. Mary's had a man over. The forwards were still playing excellently, though not obtaining the ball so often or so quickly in the tight scrums. Halford, who had been very prominent, had damaged his ear and was not playing quite so outstandingly, but Coffey's green stockings were well to the fore, his tackling of Moore being very sound. So both our last-minute selections were justifying themselves.

In the second half we did not attack nearly as much as before the interval, and when we did the fly-half and centres were too often caught in possession. At the same time it was obvious that, in the face of stern tackling from Muller and Wellbon, simple orthodoxy could not prevail and

a cut through was necessary. Crozier, too, was very sound at full-back when well tested by Birks's kicking ahead. Several times Guy's reached an attacking position, only to be sent back by long penalty touch-finders; five kicks were given against one offending Guy's forward for off-side! Then St. Mary's attacked on the right wing, and Muller took an inside pass, caught the defence on the wrong foot, and raced through to score under the posts. Jones again converted.

The fact that Guy's had to score twice to lead was, I am sorry to say, reflected in the cheering of those supporters who had journeyed as far as Chislehurst. The joyful optimism sounded to be replaced by doubtful hope, and curiously ridiculous advice took the place of encouragement. The forwards were now putting all they knew into it, Sharpe and Rochford showing up well, but again it was St. Mary's who scored. Mackintosh and two forwards broke quickly and dribbled away after a Guy's heel, and the scrum-half touched down despite a despairing dive by Christellus, who just failed to reach the ball first. And now there was no further score, despite a fine run by Crawford, after the only clean pass he received in the game, and then Douglas wriggled through on the right, only to be pulled back to where he had put one foot in touch.

And so Guy's lost to St. Mary's for the second year in succession.

Team.—W. B. Sanders; D. M. Douglas, J. Breen Turner, P. H. Birks, J. P. Crawford; P. Gartnell, G. MacVicar; A. J. Drew, R. M. Sharpe, J. P. Rochford, A. Carruthers, D. W. Burnford, C. M. Christellus, P. H. Halford, B. U. Coffey.

Hospital Information, etc.

Notices

Applications are invited for the post of Chief Clinical Assistant and Registrar in the Dermatological Department for the period 17TH MAY TO 30TH SEPTEMBER, 1939.

Applications should be sent to the Dean in the Medical School Office not later than FRIDAY, 28TH APRIL, 1939.

T. J. EVANS, *Dean.*

THE LATE MR. OSWALD MAGNIAC

We regret to announce the death of Mr. Oswald Magniac, a Governor of Guy's Hospital since 1912. A Memorial Service has been held in Southwark Cathedral.

GUY'S '89 CLUB

The response to my previous letter has been only one communication, so I think that it will be wise not to attempt a meeting this year.

GERALD S. HOVENDEN.

Pass List

UNIVERSITY OF LONDON.
SECOND EXAMINATION FOR MEDICAL DEGREES.

PART I.

March, 1930.

D. M. Carnegie
D. N. Fuller
L. F. G. Pritchard
J. Ronchetti

PART II.

For internal students.
March, 1939.
Pass.

D. W. Burgess
J. P. Crawford
P. B. Maxted
L. F. Miller
F. K. Crittenden
D. H. Crook
D. G. Dixon
P. W. Edward
J. L. G. Hartley
D. H. King
B. Kustow
N. P. W. Littler
G. H. T. Lloyd
F. R. C. Manning
V. H. Martindale
A. T. Moorhouse
A. C. Parkinson
D. D. Rees
E. R. Roseveare
B. Rowlatt
B. J. Stephens
W. J. Stevens
S. D. Stock
J. Wilks
E. Williams
D. H. Wright

SOCIETY OF APOTHECARIES OF LONDON.
PRE-MEDICAL AND PRIMARY EXAMINATIONS.

April, 1939.

Physiology.

P. Morrell-Thomas.

Papers by Guy's Men

Hopkins, Sir F. Gowland, and Others. Activity of the succinic dehydrogenase. *Nature*, 1939, cxliii, 556.

Ellis, R. W. B. Some endocrine disorders of childhood. *Practitioner*, 1939, cxlii, 463.

Payne, W. W. Diet in health and disease: xxii—Special diets in childhood. *Ibid.*, 525.

Cann, R. J. Basal-celled carcinoma of the trachea. *J. Laryng.* 1939 liv, 197.

Pringle, K. E. The relationship between incisor overlap and the extraction of upper temporary teeth. *Dent. Rec.*, 1939, lix, 190.

Conybeare, E. T. Illness occurring in contacts with confluent smallpox. *Lancet*, 1939, i, 813.

Change of Address

E. Kenneth Breakspear, L.D.S., R.C.S.Eng., 34, Station Road, Upminster, Essex. *Upminster* 563.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

SPRING with its load of mischief is with us. April shows its accustomed two-facedness. Above the Borough on one day hangs a clear blue sky, from which the sun shines warmly on the nurses in deckchairs, the bell tent in the Park, and the dressers on the Theatre Balcony. The next day the skies are leaden, the winds freeze, and snow and sleet drive all but a few hardy ones to the subways. Rumours of wars and the perils of examinations eddy around us, though we are now as much accustomed to the first as to the second.

The chief naughtiness of Spring is in that insidious restlessness it stirs in us, that feeling of vague discontent that it brings with it. Is, after all, our work everything it should be? Is it even sufficiently important to be worth doing? Is it not leisure that matters? Is it not time that we were about other business? We peer over London Bridge with two score others at the Russian cargo boats loading and unloading, and the tramp steamer waiting for the turn of the tide. A tug below juggles with half a dozen barges. The Thames seems to flow to adventure. In the dusk of evening when the air is cool, the wind dropped, and the heads of the cranes are lifted stilly above the wharf roofs, the noise of some distant ship's siren calls to us to set out at once for Mexico or Mozambique. Sanity returns with the College breakfast, but discontent remains. We vent it in considering others' discontent.

Recently, much has been said and written about the nursing profession. The present state of affairs cannot be said to be ideal. Most people have now given up the idea that a nurse must sacrifice her own life in caring for the lives of others. Nursing is coming to be regarded as any other profession—a means of livelihood for those who pursue it. Because the object of nursing is the care of the sick, which is held to be morally a good thing, it does not follow that a nurse should live only for her work.

There are two chief criticisms of the life that a nurse is at present expected to lead. The first is that the work is too hard. The second that there is too little freedom.

The conditions under which Guy's nurses work are probably as good as in any hospital, and much better than in most. Yet in Guy's the nurses are overworked. The Guy's nurse on day duty starts work at 8 a.m. and finishes at 9 p.m. Excluding meal-times she gets three hours free a day and one day free a week. She is fortunate compared with the night nurse, who starts at 9 p.m. and goes off at 8 a.m. Her free time consists of her meal-times and four nights off in the month. Thus the day nurse has an approximately 60-hour week, the night nurse about a 70-hour week. The night nurse usually does night duty for three months at a time. About one quarter to one third of her nursing training is spent by a nurse on night duty. In her time off the unqualified nurse must work for examinations, attend certain lectures, and live what there is of her private life. All Guy's nurses get three weeks' holiday in the year.

To be a good nurse is by no means easy. It requires efficiency, tact, sympathy and physical strength. A nurse who is feeling tired or ill cannot be expected to display these qualities. From the patient's point of view, therefore, overworked nurses are to be deprecated. Overwork leads to ill-health. Nurses work in an atmosphere of a much higher bacterial density than that of non-medical professions. Physical fatigue leads to lowered resistance to infection. Nurses should have every chance of developing a maximum resistance to infection. The illness of a nurse

reacts upon the Hospital by (1) the loss of that nurse's working hours while she is ill, and by (2) straining a diminished working staff which must make up the lost work. That the resistance of Guy's nurses to infection is low is evident. Nurses much more easily develop sepsis than, say, medical students. An epidemic like the last 'flu epidemic spreads through the Nurses' Home like a fire through thatch. The average Guy's nurse's complexion (when not reinforced), especially if she is on night duty, does not glow with health. Statistics of the numbers of hours lost by Guy's nurses from ill-health in the course of one year would be instructive. From the Hospital's point of view, therefore, overworked nurses are to be deprecated.

In her off-time a nurse in training lives what she will of her own life and prepares for her qualifying examinations. Fatigue is not the ideal companion for textbook reading. The mysteries of, say, medical treatment may become unfathomable to a tired mind. And, further, is not a nurse entitled to a certain amount of energy for her private life? Is it reasonable that a nurse should be too tired to play a game of tennis or to read anything more complex than a thriller in her spare time? Admittedly it is common among nurses to increase their off-time at the expense of their sleep; but this is understandable. Nurses, indeed the whole medical profession, deal constantly with ill people. Many ill people are abnormal mentally as well as physically. Their abnormalities raise in people unused to them pity, terror and disgust. But these abnormalities form the daily environment of the nursing and medical professions. In a nurse's spare time she should be able to regain her balance and recall that the majority of the people in the world do not have colostomies, that accurate temperature charts, bedpans discreetly covered, gaping wounds, revolting smells, slow and painful deaths, pus, and the hundred and one other horrors of the wards play little part in an average normal life.

Of the second criticism—that nurses have too little freedom—it is less easy to write. What is freedom? No two people agree. What degree of freedom is compatible with the necessary degree of nursing efficiency? This is a thing not lightly to be argued. But, for the moment, let the nurses' lack of freedom rest uncriticised. For, for this fortnight, we have eased the ache of our Spring's discontent.

▭

ON another page of this issue we publish a naughty little tale from the Front Surgery, in which a dresser allows himself to be the only person to see a case, which he is unable to diagnose, and that without sending the patient to Out-Patients. The hero of this story committed his indiscretion consciously, on a matter of principle; far more commonly it is that human dislike of confessing ignorance that sends a patient back into the street undiagnosed.

We at Guy's are endowed by tradition with an eminently successful system for preventing mistakes; the puzzling case is put through sieves of increasingly small mesh as the procession of dresser, O.P.O., take-in house-physician or house-surgeon, and registrar file past his couch, nor can the advice of that hard-worked night-bird the take-in assistant house-surgeon and his gallant though recent ally the house-officer of the special department, be ignored. But if the first link in the chain is not forged, this whole store of wisdom is wasted. The truth is, that it is easier and pleasanter to leave the responsibility of diagnosis to the physician or surgeon in Out-Patients next day than to hunt out a busy official in the Surgery and perhaps look a fool for one's pains. But if, as is the rule, one's conscience forbids this course, one can still usually get the O.P.O. to see the case without having either to admit ignorance or to publish a diagnosis that may turn out to be ridiculous.

Few human talents are as rare as the ability to learn as well by precept as by experience. To learn the art of diagnosis by experience alone would involve the gravest errors in treatment, and the public would rightly object. But it is possible to make a compromise between those two irreconcilables, the patient's interests and one's own. One must sacrifice one's pride, and make a diagnosis. Not just to oneself, to be altered as one watches the O.P.O. doing all those investigations that one had forgotten, but to him or to anyone else who is there. One will be a great deal more careful if one's opinion has to stand less biassed criticism than one's own; one will be far less inclined to make an idle guess. Of course, even so, the diagnosis will be often flagrantly wrong, but one will not make the same wrong diagnosis twice. And for goodness' sake remember that this wise and unnaturally solemn fellow in a white coat was a very short time ago as great a fool as you.

▭

A MONTH ago a notice was published in the *Gazette* stating that a lecture was to be given in the Anatomical Theatre on Tuesday, May 9th, by Dr. W. Randolph Lovelace, of the Mayo Clinic, on "The Use of High Concentrations of Oxygen and of Helium and Oxygen Mixtures."

Tuesday is the Hospitals' Flag Day, and on this account the lecture will take place instead on Monday, May 8th, at 5 p.m.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.

(*continued*)

Sweet's paper on the ductless glands and carbohydrate metabolism was a masterly and scholarly one of great interest and beautifully given. There was far too much to note, but the striking point left with me is that an animal is in every way happier and more normal if pancreas and pituitary are removed than if only one is taken.

A normal dog uses 50 gms. of glucose (? per hour or day).

A depancreatised dog uses 0 gms. of glucose (? per hour or day).

One deprived of pancreas and pituitary uses 30 gms. and lives far longer. His muscles can oxidise sugar, whereas those of the first cannot.

Heuer led in two dogs as preliminary to discussion on hypertension. Each had one kidney transplanted to the groin and the other removed; they both seemed very healthy and cheery. The renal artery was under a clamp, and the blood pressure 200 mm.

Glenn.—Destruction of cord in animals with hypertension, produced by clamping renal pedicle, leads first to a drop in blood pressure, with a subsequent rise to hypertension level, but not as high as before. Cord is, of course, destroyed below C.5 level. Experiments suggest the doubtful value of attempts to reduce blood pressure by increasing the capillary bed. Our operations probably act by increasing the blood flow to the kidney, thus removing Nature's clamp.

Child's contribution was the carotid artery exteriorised in a skin tube, and cuff round artery, the sounds being modified by a microphone.

Heuer gave a magnificent summary of hypertension, much of the scribbled notes of which I am unfortunately now unable to read.

Splanchnic operation, renal denervation, and operations on the spinal cord or its roots, have only a temporary effect in animals. In patients after a temporary reduction some exceed their preoperative level, others reach it, some stay below it permanently or for years. Other surgeons have also had this permanent reduction in a proportion of their cases, so the problem must be different from the dog.

Of 13 cases, eight tend to stay down and five to rise. He has had one success with renal denervation; in four bilateral denervations for chronic nephritis there was a temporary reduction.

Against this a boy with malignant hypertension had a motor accident. His blood pressure fell to normal, and has remained there for two years. (something illegible).

Subjective improvement is often remarkable, and much more common; often quite out of proportion to the reduction in blood pressure obtained. Disc œdema and retinal changes may also improve.

Saturday, November 13th—Roosevelt Hospital

Dr. Sterling Mueller gave an interesting and amusing account of the use of alcohol intravenously. Alcohol occurs in all animal tissues. It was first used intravenously at the Bellvue Hospital in 1932. being used at first to secure sterilisation of intravenous solutions at a time when they were worried by rigors, for which purpose 2 per cent. was added. They can use up to 10 per cent., but 5 per cent. is the strength usually employed. Given slowly, 96 per cent. of alcohol is utilised in the tissues; none accumulates. About 10 c.c. per hour can be used thus normally, more with fever. A much greater caloric value can be given and used in alcohol than in glucose. While the normal is 5 per cent. he quoted two accidents to show that the intravenous method is comparatively safe. A man swallowed 2½ pints of 95 per cent. alcohol, and died in about an hour. Another was given, by mistake, 1 pint of 95 per cent. alcohol intravenously in 40 minutes. He passed rapidly into the third stage of anæsthesia, and remained there for four or five hours, but instead of dying he woke up refreshed and happy.

They use it in peritonitis, wasting diseases, all conditions in which feeding is a problem. Diabetics will utilise alcohol where they cannot deal with sugar; one had 52,000 c.c. in three weeks. He suggested two possible uses—for anæsthesia and for euthanasia; in medicinal doses it produces sleep and a feeling of well-being, without the digestive upsets or hangover of drinking.

Mackie talked on ulcerative colitis. He says they find every kind of infection to be responsible. Indications for surgery: (1) Threatened perforation or severe hæmorrhage; (2) After complete failure of prolonged and conscientious medical treatment. The only useful procedure is (1) ileostomy and later (2) resection of colon. He does not think ileo-sigmoidostomy is ever much use. (Some reference to Rankin's book, which is said to be good on this subject.)

Henry Cave speaking, says rectum has to be removed in great majority. Not only is it usually involved, but he thinks (and many seemed to agree with him) that the ileum does not become properly colonised till the rectum is removed. Suggests that there may be some reflex connection between the two segments.

They also find aluminium powder the best dressing for an ileostomy.

We had a help-yourself lunch at Dr. Cave's house, and then went on to Notre Dame V Army football match at the Yankee Stadium. I had a ticket for one place, but went to another with Dean Lewis. We were a little late, and as we were going up the staircases we heard a louder cheer than the rest, signalling the first and only score of the game by Notre Dame.

Getting to our seats, high up near the centre, we looked down on a field like a rugby field, but it is ruled throughout across its whole width in 5-yard lines, and the touch-down line is 10 yards before the goal-line, instead of being the same. The game superficially like, is entirely different, and, I should say, a rotten game. I cannot help feeling that a tour by two decent rugby sides would wash it off the map, unless young Americans are hopelessly callow. The main features of the game are that it consists not of continuous play but of a series of manœuvres, planned beforehand and discussed in secret; each ruse takes anything from 10 seconds to 2 minutes, and then the game stops, to let the attacking side meet for a huddle—a secret conference to plan the next move. That the object is to succeed more by guile and deceit than by strength or skill; in each manœuvre one man is given the ball, but each other one of the side helps him by charging in a phalanx before him, by tripping up opponents who might tackle him, or by running off with his arms round an imaginary ball to deceive the opposing backs. And that there is no limit of any kind to substitution. Eight or nine times in the game Notre Dame put an entire new team into the field; the last occasion was only a minute before the final whistle, when they were 10 yards from the Army line and they hoped to rush the ball over. Seeing these things, that a man only plays about a quarter of the game, that with no dribbling he cannot get kicked, and that he is unlikely to run far enough to be tackled as hard as in rugby, it seems rather ridiculous to see these lads in crash helmets, with padded shoulders and elaborate leg-guards. Enthusiasts point to the number of men hurt in a season. But any man who dresses in armour is bound to get hurt or hurt somebody else. The speed of players thus wrapped up never approaches that of a rugby three-quarter, and the impact is correspondingly less, and only becomes dangerous because of the metal round the place. Still there it is.

It rained all day, so the game was not up to its best. Organised singing of team choruses and cheering in unison under cheer-leaders is a feature of the spectators' side of the game, but the rain damped this too.

We had dinner at Jensen's, a German Beer Hall, and Dean Lewis, cheery soul, went off.

Sunday, November 14th

I spent this day largely writing up this sheet, which had got badly behindhand at Boston, and which is only now being finished on the S.S. *Washington*. Hence my inability to read bits. I got Massie's cousin on the telephone, and met her and her husband for a cinema and dinner.

Monday, November 15th

At 11 a.m. I went to the Rockefeller Institute to see Carrell. His work is above my discussion, but it was a privilege to meet such a man. The great piece of work at present is the Lindbergh pump, a wonderful artificial circulation, in which they keep organs or bits of organs with blood supply intact alive for periods up to three weeks on an artificial circulating fluid which can be modified at will. Thus the effect of single constituents on growth or metabolism can be studied without any complicating factor.

Leaving him, I took a taxi to the Presbyterian Hospital to lunch with William Darrach, a very charming and very handsome old gentleman and a friend of Cuthbert Wallace.

After lunch I went round the fracture department with him. Their methods are very much ours, except that they do a lot more bone-plating. Their fracture apparatus was of the simplest, the suspension frame consisting of 2 by 1 beams in various lengths. As a basis were head and foot pieces, with a curved bit padded with felt to rest on the rail at the head and the foot. To this battens were bolted by lever action carriage clamps wherever wanted. Two battens were usually used as longitudinals, but these could be doubled

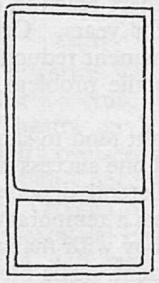

Fig. 105.

or even trebled. Pattern of the lever action clamp with me; 20 or 30 of these might be used in one frame, but the whole thing is very simple. Pulleys were brass yacht blocks of good quality; indeed the yachting influence was very strong. Rigging screws were put at the sides of Thomas splints (or Hodges, which they use a lot) to adjust the angle of the knee piece, and foresail trigger action hanks were used to hook on the weights, for which they used large buckshot in bags. Kirschner wires, original Kirschner stirrups, Sven Johannsen drill. One thing that took my fancy was a fractured clavicle with bad displacement in a girl. This was being treated by hyperabduction

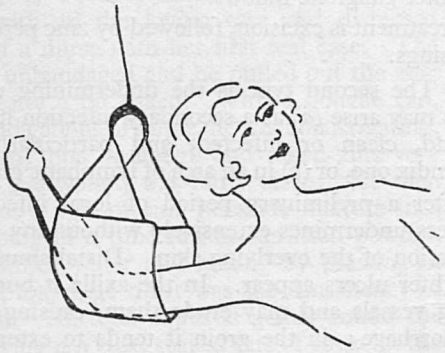

Fig. 106.

to 135° with mild traction in an arm-sling of the Blake type. As spreaders they use the old horse-shoes of Finochietto stirrups. For ordinary fractured clavicle they use a plaster figure of 8 without a sling. A good idea was tripod walking sticks as an alternative to crutches, to teach people to walk.

Fig. 107.

Dr. Harvey then took me over to show an analysis of their gastric follow-up that is being got ready for publication in the near future in *Archives of Surgery*. Dr. St. John is partly responsible. It is valuable in that it extends over twenty years, that most of the cases have been followed, that it includes work by all the surgeons and residents, and that it is entirely honest. It includes 4 to 500 cases. Below are some extracts from an enormous mass of analyses :—

Duodenal Ulcer. Satisfactory results after gastro-jejunostomy :—

When done for obstruction	81 per cent.
When done for bleeding	41 „
When done for pain	44 „
Total	56 „

Satisfactory means not a trouble of any kind at any time. He says that, contrary to my impression, a gastro-jejunostomy will often get quite right again after being wrong for some time.

Gastro-jejunostomy.—Mortality	10 per cent.
Partial Gastrectomy.—Mortality	18 „
Satisfactory cases	76 „

Billroth, I, Moynihan (lumped together, I can't think why; they must mean something different by Moynihan; only nine cases combined) :—

Mortality	22 per cent.
Satisfactory cases	43 „

Pyloroplasty (not followed sufficiently long) :—

Finney	13 cases; satisfactory	70 per cent.
Others	14 „ „	55 „

These results are unnecessarily gloomy, as any man who has had one return of pain even in 20 years comes thereby out of the satisfactory cases class. Analysis from the point of view of percentage of time symptoms free is much more encouraging :—

	Of years.
Posterior Gastro-jejunostomy for —	
Obstruction	91 per cent.
Bleeding	80 „
Pain	76 „
Partial Gastrectomy	85 „
Pyloroplasty	85 „

Of 281 patients followed, seven died of their ulcer.

Gastric Ulcer.—

Gastrectomy—	
Mortality, 3/57	about 5.25 per cent. (why so good?)
Satisfactory	90 per cent.
Gastro-jejunostomy.—	
Satisfactory	23 per cent. (small number only)

According to years :—	*Of years*
Gastrectomy, Satisfactory	92 per cent.
Gastro-jejunostomy, Satisfactory	41 „

(Out of 13 gastro-jejunostomies, three died from ulcer afterwards.)

There was no particular time for recurrent symptoms or recurrent ulcer to appear; they are just as likely after ten years as after two. Of unsatisfactory cases, about half had recurrent ulcers and about one-third bled.

Some points in death analyses

Gastro-jejunostomy.—
Deaths in hospital 23
Pneumonia 7
Hæmorrhage 7
Peritonitis 2
Others mixed (two loop obstructions).

Gastrectomy.—
Deaths in hospital 22
Hæmorrhage 2
Pneumonia 3
Leakage from duodenal stump 7
Peritonitis (? due to same cause) 2

Gastrectomy complications requiring second operation, not fatal.—
Recurrent ulcer 2
Peritonitis 2
Leaking duodenal stump 2
Acute ileus 5

As a check on this follow-up, 100 unselected cases from the fracture clinic were subjected to the same series of questions as those attending the gastric follow-up. Only 80 per cent. of them were satisfactory.

After this I got in charge of Frank Meleney. He is a young middle-aged surgeon who was advised by Whipple to take up bacteriology as a special study, and has lit on what are considered to be two specific types of gangrene, due to what he calls micro-anærobic organisms (i.e., ones that are isolated in anærobic culture, but can easily adapt themselves to ærobic growths.)

1. One type is what he calls *synergistic gangrene*; is due to symbiosis of a non-hæmolytic micro-anærobic streptococcus viridans with a hæmolytic staphylococcus aureus.

This synergistic type of gangrene usually follows drainage of a lung abscess or a wound of intestine, particularly appendix abscess. It is very apt to start round a tension suture. Once started it spreads slowly and relentlessly in a centrifugal direction, but does not go deep to deep fascia. It is arrested by wide excision. Typical of it is extreme pain. Poate (Australian) reports a case that slowly went round and met at the back, taking a year to do so; the patient died.

The double nature of this infection is confirmed by animal injection. If either the staphylococcus or the streptococcus are injected alone a mild infection alone results, but if the two are injected together gangrene follows.

Treatment is excision, followed by zinc peroxide dressings.

2. The second type is the undermining ulcer. This may arise (*a*) as a secondary infection in any wound, clean or infected, and particularly an appendix one, or (*b*) in an area of lymphatic glands.

After a preliminary period of local infection, process undermines extensively without any gross alteration of the overlying skin. Distal sinus and daughter ulcers appear. In the axilla it burrows along vessels and may erode them, causing fatal hæmorrhage; in the groin it tends to extend in the cruro-scrotal fold. Prolonged suppuration leads to amyloid disease.

This type is caused by a micro-anærobic hæmolytic streptococcus in pure culture. The organism can only be recovered anærobically, but after one or two days it grows ærobically. It is not green till it has changed to the ærobic habit.

Here the treatment is first a surgery of access and then zinc peroxide. The wound must be laid widely open in every pocket so that intimate

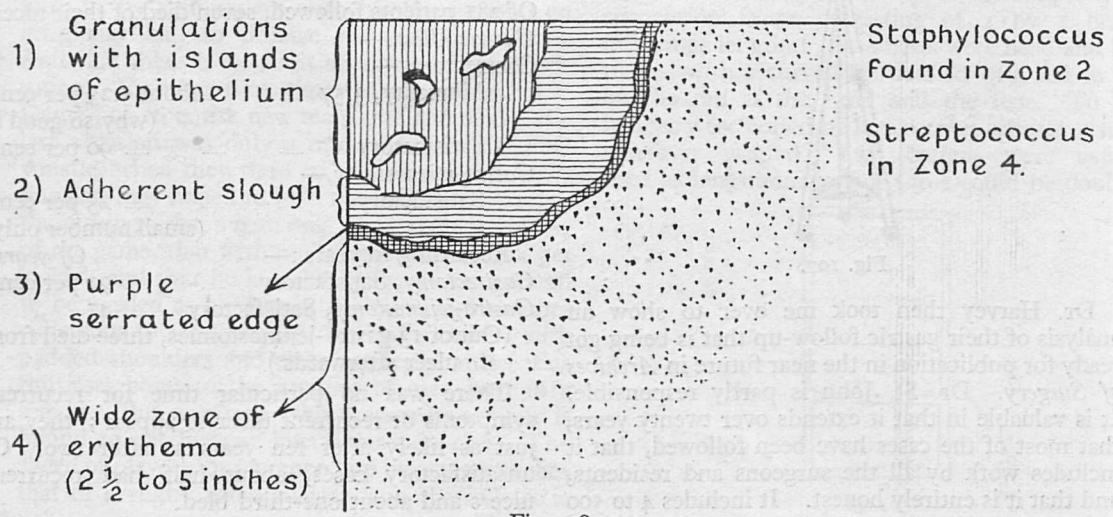
1) Granulations with islands of epithelium
2) Adherent slough
3) Purple serrated edge
4) Wide zone of erythema (2½ to 5 inches)
Staphylococcus found in Zone 2
Streptococcus in Zone 4.

Fig. 108.

contact between the peroxide and the infected layers can be obtained.

The case I saw appeared an extreme example of the lymphatic gland group. The poor chap had a hernia operation done in the war, and ever since he had had undermining ulcers in the right axilla and both groins. Photographs showed wide scarring and polypoid projections of skin between the sinuses. He had been widely excised and was to be dressed. The three essentials seem to be :—

1. The right peroxide.
2. Intimate contact.
3. Precautions against drying.

Meleney is a super-enthusiast. He did this dressing with all the loving care and disregard for time of a nurse with her first real case. The axilla was unbandaged and he pulled out the zinc packs, already a bit caked. With a douche can, catheter and gallons of saline, he went on irrigating, getting many bits of slough and caked zinc very gently till the wound was fairly clean. He then made about a pint of zinc peroxide mixture in a basin, tipping in a tube full of sterilised powder, adding distilled water and mixing by drawing in and out of a syringe till it was the consistency of thin cream. He then squirted gently round the wound, giving it a coat, soaked bits of gauze in the paste, and packed them gently into all corners ; filled up the axilla with more zinc gauze, and finally laid across broad strips of folded gauze smeared in a zinc peroxide ointment. In another case he used vaseline gauze for this purpose of preventing drying.

The zinc peroxide is selected because it gives off oxygen slowly and gently for 24 hours, the time the dressings are kept. Meleney first discovered its value accidentally, the first lot he bought being curative. The next lots were of no value, and they have since found that samples vary very greatly in the amount of oxygen they give off, and have established a series of simple tests, of which I have a copy. The difference between good and useless specimens is apparently a physical one, the chemical analysis being identical. At present Du Pont are the only people able to turn out the correct powder regularly. Meleney gave me generous sample.

While he was doing this dressing he got a call to see a case at Brooklyn, and asked me if I would like to accompany him. We got in his car, with him were two house surgeons and a good supply of zinc peroxide. We had a wonderful drive from the Presbyterian Hospital, which is on a rocky height pretty near the north-west corner of Manhattan Island, down the west shore along the Hudson River on a new speed road that has been built over one of the railways. Near the southern end we turned across and crossed the bridge into Brooklyn, and finally found the hospital where our patient was.

The whole crowd were Jews—the doctor, apparently a very able fellow who had spotted an undermining ulcer and treated it along Meleney's lines, the patient a young lad with an appendix wound that, at first clean, had started undermining and now was under the skin down to Poupart's ligament both sides, and up on each side of the umbilicus without any indication in the surface appearance of such extensive undermining. Reasons for non-success—either the zinc peroxide was wrong—it was not Du Pont, or the dressings were not in thorough contact. After a lengthy dressing and taking cultures, Meleney decided to operate. I had to leave and caught a subway back, getting to the hotel pretty late.

Tuesday, November 16th

My last day in America. I spent the morning shopping, and then got hold of Fred's friend, Dr. Foster Kennedy. I saw him in his rooms, and he asked me to dinner and the theatre—a chance to see " I'd Rather be Right," for which tickets are quite unobtainable by the ordinary man. His house is one of the most delightful I have seen, jutting out into East River, with a wonderful panorama of shipping, bridges and skyscraper skyline all round him. The play was good, and it is a great thing to think that one country still remains where fun can be poked at its ruler without fear of death or imprisonment.

(*Conclusion.*)

A Question of Ethics

By I. S.

" THE important thing," said the Junior Dresser, leaning forward with his elbows on the Front Surgery table, " is to give the patient what he wants. That's all there is to it really. It's not for us to moralise, and who are we to say what's good for him ? But sometimes it's very difficult."

A Surgical Ward Clerk said that maybe most people wanted to get better.

" Of course," replied the Junior Dresser, " but

people so seldom say what they're really thinking. They always want to hear the best, and it's only when you've been in the wards for a bit——"

"Ah! I was forgetting how experienced you are!"

"—— Only when you've been in the wards for some months," repeated the Junior Dresser with dignity, "that you begin to realise how often people ask for one thing when really they want something quite different, or beg to be told the worst when really they would never forgive you for destroying their tiny bit of self-delusion."

"Rather a responsibility, isn't it?" questioned the Staff Nurse, "to decide that what a man wants may be the reverse of what he says?"

"Undoubtedly. But for his own sake quite necessary," maintained the Junior Dresser. And with this weighty pronouncement he walked over to the door and looked out into the Maze Pond. It was a cheerless night. The soft, insistent hiss of rain mingled with the gurgle of the flooded gutters. Between the tall buildings the street carved a black chasm that led to the pool of light around the surgery door. In the gloom beyond deep puddles had formed in the uneven surface of the roadway and lay darkly waiting to trap the unwary pedestrian.

The Junior Dresser turned away with a shiver, and went back to the group at the table. "I'll give you an example of what I mean," he said slowly, and the lethargy of forced idleness lay so heavy upon his companions that no one tried to stop him.

"It was a night very like this a few days ago," said the Junior Dresser; "pouring with rain and cold and miserable, and you know how that seems to keep people away. There'd hardly been a case all the evening, and I was very tired of hanging about without a thing to do. Eventually a girl came in. About twenty I should think she was. I was doing the women's side that night and I saw her at once.

"She said there was something wrong with her foot, though I hadn't seen her limping when she came in. She wasn't a pretty girl at all. Plumpish, and a few wisps of wet brown hair, and her figure shapelessly muffled in an old khaki mackintosh down which the water ran in little streams and dripped on to the floor.

"I had a look at her foot, and there didn't seem to be much wrong with it. A bit hot and dirty, with a red place on one toe where her shoe had rubbed, like all these girls have. I told her there didn't seem to be anything much the matter, and she didn't look surprised at that. I put a small piece of plaster on the sore place. But even as I did so it struck me that there was something queer about that rub. The inflammation extended back off the dorsum of the toe to the hollow at its base, where it was hard to understand how any shoe could chafe it. In any case I couldn't help wondering what had made her come all the way to the hospital for such a trivial thing, and on such a foul night. She'd told me she was a maid-servant in Kensington.

"And then she said she'd got some spots on her arms that itched a lot and had been keeping her awake at night. I told her I'd have a look at them, and sure enough she'd got a very nasty-looking rash on her chest and shoulders and down both arms nearly to the elbows. She said it'd been there for several months, so I knew it couldn't be one of the fevers, but apart from that, of course, I hadn't a notion what it was, and I gave her a card for the Out-Patients of the next day.

"She was very dismayed at that, and asked whether she mightn't see the Skin doctor at once.

"When I told her this was impossible she hesitated for a few moments and then said she couldn't possibly come back. I didn't say anything, and presently she told me why. Apparently she'd told the cook, who controlled her destiny in the household where she worked, that she was going to the hospital about her foot, and if it ever became known that she'd got skin trouble she'd lose her job. 'And now they'll see,' she added, almost in tears, 'that it doesn't even need a bandage.'

"I said I was sorry, but there was nothing I could do for her about that. She must try the best she could. It was scarcely anything to do with me.

"And then I had an idea. Was I not being really very obtuse? Was not here at last being offered to me an opportunity to fulfil the highest possible obligation to a patient?

"'Let's see the foot again,' I said, 'it may be worse than I thought.' And in an instant she had again torn off her shoe and stocking. Yes, sure enough, no shoe could have been responsible for all those markings. Something had been rubbed there deliberately. 'Yes, I'm afraid it is,' I said. 'You can't be too careful with these sore toes, and you don't want to get blood-poisoning.' And, reaching for the bandages, 4-inch size, I gave her a leg like a prime minister with gout."

The Staff Nurse at the table picked up her scissors and sent them ripping through a fresh sheet of lint, and the Surgical Ward Clerk looked up wearily and rubbed his eyes. "You're just a charlatan," he said.

"If you like," said the Junior Dresser, "but I gave the patient what she wanted."

General Anæsthesia in Dental Surgery

A Paper read before the Dental Society on Monday 1st November, 1938, by H. R. D. Porter, Esq., in conjunction with J. W. S. Harvey, Esq.

MR. CHAIRMAN and GENTLEMEN,—The purpose of this paper is first to get a clear-cut and as concise a view as possible of general anæsthesia as related to dental surgery. Secondly, to ascertain the type and course of anæsthesia we should expect, and the one of choice for operation. With this in view we present this paper. It must be pointed out that time forbids us to make any real attempt to give full details in administration, but together with all this there may be, in the case of a national emergency, occasions when dental surgeons or students would be asked to give anæsthetics after some practical instruction.

In general, anæsthesia may be divided up into the following three types :—

1. Basal.
2. Inhalation.
3. So-termed " combination anæsthesia."

And each may be subdivided into :—

1. Premedication.
2. Administration.

These, of course, are modified by whether it is a major or minor undertaking. For general purposes a minor anæsthetic may be considered as one that lasts from 1½ to 5 minutes, and is in the chair. A major anæsthetic is one which takes place on the table and lasts anything up to 1½ hours. Children, of course, require different treatment.

PREMEDICATION

Dealing with these in turn, for adults no premedication is necessary, for short cases using Evipan Sodium or Pentothal, whilst for gas and air the ordinary precautions should be taken, which will be enumerated and emphasized later. For major operations the patient should spend at least the previous night in the institution. The following premedicants are usually used :—

1. *Avertin.*—This is given per rectum in 2½ per cent. solution in distilled water about 30-45 minutes before operation. The dose varies with the patient and is calculated as 0.075-0.1 gramme per kilo body weight. Bayers, the manufacturers, provide a useful chart for calculation. The administration should be with the patient on the left side, given through a well-lubricated soft rubber catheter, and the fluid run in slowly over from five to ten minutes. The patient should not be disturbed again, and all the surroundings should be as soporific as possible. Avertin decomposes rapidly, and the solution should be made up as required and kept at body temperature. It should remain pink when Congo red is added. If decomposition takes place the colour alters to blue, due to the formation of hydrobromic acid. In this hospital an enema is given early in the morning, but if an ordinary purge is given 24 hours beforehand the enema is not always necessary, but the rectum should be empty for maximum absorption. Avertin is tolerated well by all people from children of six upwards.

2. *Paraldehyde.*—This is given per rectum as a 10 per cent. solution in normal saline. The dose is 1 dram to a stone body weight. The maximum dose is said to be 840 grains. Five per cent. glucose is usually added. The disadvantage is that paraldehyde is excreted through the lungs and has an objectionable odour. It is more unpleasant for adults than children.

3. *Nembutal.*—Nembutal is a white crystalline powder with a somewhat bitter but not unpleasant taste, odourless and freely soluble in water. It is given by injection intravenously, orally, or per rectum. Its action is sedative rather than analgesic.

By injection adults should be given I.M.H. gr. 1/16 and then with a 10-c.c. syringe full a vein is selected in the antecubital fossa, and it is injected at the rate of 1 c.c./min., and after unconsciousness is produced another 1 c.c. given. By mouth it is given as before with I.M.H. gr. 1/6 in two capsules containing 1½ grains each. One must be careful to inspect the patient's arm before promising to give an intravenous anæsthetic. Morphine and Nembutal are synergistic, and hence care must be exercised not to depress respiration too much. Nembutal can be given rectally either as a suppository or in 1 to 2 ounces or water. Its chief disadvantage lies in a post-operative restlessness in a small percentage of cases. It is contra-indicated in old persons, those with pulmonary diseases or renal or hepatic damage.

4. *Evipan and Pentothal.*—Evipan is given in a 10 per cent. solution, whilst Pentothal is in 5 per cent. To mix the solution the distilled water is withdrawn from one ampoule and injected into the one containing the powder. It is then thoroughly mixed by sucking it up and ejecting it again two or three times. It is best to give Omnopon gr. 1/5 and Scopolanime gr. 1/150 before operation. The best vein is selected in the antecubital fossa,

cleaned with spirit and the vein distended by some pressure above. The pressure is released before injection starts. It should be carried out at the rate of 1 c.c. every 15 seconds. It is best to give a safety pause of one minute after 3 c.c. have been given. Usually 3 to 5 c.c. are required. A good airway should always be maintained, otherwise jactitation may occur with Evipan. Bayers, the manufacturers of Evipan, state that if it is warmed to body temperature and the solution left for a few minutes, jactitation never occurs. The solution may be warmed by immersing the ampoule in a small glass of hot water. Likewise they say that the administration of Atropine before Evipan is not contra-indicated, but this seems doubtful in the light of others' experience. If Atropine is necessary, it should be given after the Evipan has been injected. Overdosage, as indicated by respiratory paralysis, should be treated with CO_2 7½%, O_2 92½%, artificial respiration, Coramine 2-4 c.c., and Alpha Lobeline gr. 3/20-3/10. Contra-indications are :—

1. Damaged liver.
2. Low blood pressure.
3. Cachexia and dehydration.
4. Poor veins.

6. *Other Drugs.*—Omnopon gr. 1/3, Scopolanine gr. 1/150, Alonal tablets two may be given. Chloral, age plus 1 grain and Potassium Bromide gr. 2 to 10 given the previous night and the morning of operation are useful for children. Calcium may be given to encourage clotting, and glucose is very useful in glycopœnic children.

MANAGEMENT

Before any general anæsthetic is given it is desirable that a history of the patient should be taken and an examination made. The patient should be asked whether there is breathlessness on exertion, swelling of the ankles, chronic cough, asthma, or whether they suffer from diabetes or any chronic condition of heart, lungs or kidneys.

The general appearance of the patient should be noted, thus there may be anæmia, the earthy complexion of chronic toxæmia, the plethoric appearance of high blood pressure, cyanosis, breathlessness; or the spider nævi, telltale nose and tremor of the chronic alcoholic and the early extreme vivaciousness and later the startled expression of thyrotoxicosis. These points all have a bearing on the choice of premedication and anæsthetic. The patient should also be asked if he has ever had gas—or whatever anæsthetic to be given—before. Adults and parents of children should be told what type of anæsthetic is going to be used, since, for example, in a nervous patient the contemplation of a prick in the arm or the insertion of a solution into the rectum is much less formidable than the contemplation of an inhalation anæsthetic.

For operations on the table the patient should come into the home the night before, and be given what one surgeon of this hospital calls a " polite " purge, *e.g.*, the one they are used to, or liquid paraffin 3 ounces or Pulv. Glycerrizæ Co. gr. 30 the same night. For operations in the chair the patients may be told that they can have a light meal up to 2½ hours before the time of the appointment. They should be accompanied by some responsible person over 21. The bladder should be emptied before the anæsthetic—and for those contemplating planning their surgeries and waiting rooms this fact might be remembered with advantage, and those who have ever had to wait for any length of time without such luxuries—not to mention conveniences—will appreciate the point.

ADMINISTRATION

1. *Basal Anæsthetics.*—For the chair Evipan is the favoured drug, being safer than Pentothal in the sitting position, though relaxation is not so good. The dental prop should be put in before injection is started, as valuable time might be wasted in getting the mouth open. The chair should be tilted slightly backwards to prevent the patient from falling forwards, and the patient told to sit with hands crossed on the knees and with feet on the base—and not on the foot stand. The neck should be free—so that for a man his collar, tie and front stud should be removed. It is usually stated that all tight clothing should be removed, but in the case of a female we do not consider this practicable. Any dentures should be removed. The dental prop should be tried in, and be such that the patient has to bite on it slightly to maintain it in position, and sound teeth should be utilised for the bite.

For major operations Paraldehyde, Avertin, Nembutal, Evipan or Pentothal are used. It is often found that rectal injections are not well tolerated unless really well given, but both Paraldehyde and Avertin are greatly used. Generally speaking, it is inadvisable to use Avertin in a child under five. The difficulty of giving drugs intravenously to children is that the veins are so small. For children from two to five Nembutal is best given mixed with a jam or honey sandwich. The manufacturers have just produced an Elixir which contains gr. 1.5 in 1 ounce. The dosage is gr. 1.5—2, or .6 gr./stone. Atropine gr. 1/150 may be given at the same time. From five to twelve, Avertin may be used instead, using Bayer's chart for calculating the dose—1 grm./kilo. Over

12 Evipan or Pentothal are often used, preceded by Omnopon gr. 1/6.

2. *Inhalation Anæsthesia.*—A. Gas and air. This is the commonest general dental anæsthetic used in this country and U.S.A. It is usually given by a foot machine and is used for operations lasting under five minutes.

Before starting it is essential to see that all unions are secure and that there is an ample supply of gas, *i.e.*, there should be at least one spare full cylinder close at hand. The patient should be shown the face-piece, and the procedure explained, stressing the desirability of nose breathing—and this simple move may mean just the difference between a calm or a tempestuous induction.

The smell of the gas may be disguised by placing gauze on which are a few drops of bitter orange peel or eau-de-Cologne in the face-piece.

The bag should be gently filled to just short of its capacity, with the tap at the face-piece closed. The face-piece is gently placed close to the patient's nose and the tap opened, while the patient is told repeatedly to breathe through the nose—thus the first few breaths are gas and air, and then the face-piece is applied accurately to the face.

The pressure of the gas is controlled by the knee pressing the bag against the chair, while the volume of gas delivered is governed by a foot key; thus the anæsthetist is able to, and should, keep his eyes on the patient throughout the whole anæsthetic. Mouth-breathing may often be overcome by simply increasing the pressure of delivery of the gas, or the mouth can be occluded using the bib and palm of the hand, or by using the mouth-piece of the de Caux McKesson apparatus, or by closing the expiratory valve of the Karn Jenkins mouth-piece.

It is essential to maintain firm adaptation of the rubber face-piece to the soft tissues—using the first, second and third fingers of each hand, while the remaining fingers hold the jaw forward—often against staunch though unintentional opposition by the dental surgeon—and this maintains a patent airway.

The position of the valve would seem to be a point on which opinions differ, but for children it must be open to insure adequate oxygenation. Great strain is thrown on the patient if the bag is allowed to become empty or too full, and a feeling of intense suffocation ensues.

Gradually the breathing becomes deeper and more regular, and later the eyelids flicker; the sense of hearing is still acute, and it is now that the soothing voice of the anæsthetist is most encouraging to the patient; it should be remembered that at this stage of anæsthesia such remarks as: "Which side is it?" or "Where's the gag?" may leave a lasting impression on the patient's mind.

Breathing becomes more automatic, deeper and quicker, and there is a short catch in expiration and a slight snort in the following inspiration; this is full gas anæsthesia. Some authorities state that this normally takes about fourteen breaths. The degree of sub-oxygenation varies with the patient, and the colour of the face is no safe guide to the depth of anæsthesia. The eyes are fixed and the pupils small.

A moist sponge, to which is attached a 6-inch piece of tape, is then inserted into the back of the mouth, but must not be rammed back so far that it wedges the soft palate against the posterior pharyngeal wall and occludes the airway.

The signs of nitrous oxide overdosage and asphyxia are cyanosis, dilated pupils, jacitations and jerky breathing, rigidity and rising out of the chair, then respiratory, and finally cardiac, failure.

B. Gas and oxygen—using such an apparatus as the McKesson. The advantages of this method are that a smoother and longer anæsthesia can be maintained with less suboxygenation; it is therefore particularly suitable for patients who are not "A.1" fit, children, and operations which may last over five minutes.

The machines, though costly and until recently difficult to transport, enable gas and oxygen to be given at known pressures, and have an emergency device for positive inflation of the lungs with pure oxygen.

The usual procedure is to induce with pure gas, and then maintain either with intermittent bursts of pure oxygen using the resuscitation button, or using a continuous stream of 5 to 20 per cent. oxygen, quiet regular breathing being the essential gauge to the composition of the gases.

Some authorities consider that the gauges on the machines constitute a disadvantage in that they necessitate taking the eyes off the patient to consult them; the same criticism might presumably be levelled against the use of a "rev. counter" and oil-pressure gauge on a car.

The face-piece should be washed in soap and water and rinsed in carbolic for each case.

C. Gas, oxygen and mineral ether.—This is usually given for major operations, using a Walton type of apparatus with Magill's or Challis's tubes. The patient is induced with gas, then oxygen added so that there are 5 parts of gas to 2-3 of oxygen; ether is then added slowly, and the patient deeply anæsthetised to obtain full relaxation for the passage of the intratracheal tubes; these should be lubricated with vaseline over the lower half only so that some part of the tube can be

held firmly. The tubes usually used are number 7-8, and may be passed :—

1. Blindly. This is tried first and used by most anæsthetists.

2. By laryngoscope—and this is the recommended method—care being taken not to injure the anterior teeth.

3. By fingers—in edentulous patients preferably.

4. Using a London Hospital prop.

The great danger is that of passing the tube into the œsophagus. The pharynx is packed with sponges soaked in paraffin—to prevent post-operative sore throat.

Once the tubes have been passed and the pharynx packed, little or no ether is needed for maintenance of anæsthesia.

D. Cyclopropane and vinesthene by the closed or continuous drip method are not used extensively enough in major dental surgery to warrant description.

E. Ethyl chloride.—This is the popular short anæsthetic for children, though it would seem to be challenged by vinesthene—which has already been mentioned. The open method has been in use at Guy's since 1919 and there have been no fatalities ; thus it is comparatively safe used in this way, easily transported and easily given. The disadvantage is that it is wasteful.

As with every successful technique, it is attention to small points of detail that insure the smoothness of the whole procedure.

It is desirable to ask the mother's permission beforehand to continue by " gentle but firm persuasion " in the event of non-co-operation of the child, and explain the possible alternative of avertin, gas and oxygen given at the child's home.

A suitable prop is selected, tried in, and placed in position. Two layers of gauze are spread over the appropriate size of the mask and ethyl chloride is sprayed on the inside till it is just damp, and the vapour is not breath-taking. For children of suitable intelligence it is possible to gain their confidence by simple explanation of what is required, or by letting the child see the mother smell the mask (provided the concentration of the vapour is low). The child is told to sniff the vapour, while the mask is gradually approximated to the face, and steadied by the thumb and index finger of the left hand—placing the remaining fingers of the same hand under the mandible to hold the jaw forward ; the anæsthetist can then follow the movements of the head, and yet keep the mask in position. Ethyl chloride is sprayed on the mask while the child is breathing—stopping when the child holds its breath, and remembering that too much vapour early may cause syncope. Breathing becomes deeper and more rapid, and during the last part of the induction the ethyl chloride spray may be laid aside and the mask covered by the right hand. Cyanosis should not be permitted to occur, and regular breathing is again the safest sign of anæsthesia.

F. Vinesthene—is a colourless liquid, volatile and easily decomposed ; it is highly inflammable and has an odour of garlic.

It is a safe drug because in overdosage the respiratory centre is depressed before the cardiac centre. It can be administered either in open or closed methods—the latter being more often used, and is less wasteful. A modified Ormsby ether inhaler is a satisfactory piece of equipment—consisting of a face-piece connected to a soft rubber bag by two metal tubes which rotate, the one inside the other. A sponge is inside the tube, and the vinesthene ampoule is broken off and the contents poured on to the sponge through a small funnel. The tubes are then twisted so that the inside is shut off. The method of administration is that the bag is distended with the expired air for about two breaths, and the vinesthene then poured on to the sponge and the circuit closed. Induction takes about 20 seconds, and the anæsthesia lasts from 40 to 60 seconds. Induction is rapid and smooth, and automatic respiration reached early. The eyes are fixed, and the face slightly flushed. Eye signs are not always constant and so cannot be relied on. Salivation may be excessive and troublesome, but this can be relieved with atropine, *e.g.* :—

Tinct. Opii Camph.	mm. 10
Tinct. Belladonna	mm. 10
Syr. Aurantii	ad dr. 1.

which should be given at least thirty minutes before the operation. Post-operative nausea, vomiting, faintness or dizziness are rare. Theoretically, vinesthene should not be used with avertin in cases of liver damage, but how far this holds in practice is doubtful. Care must be taken not to use an ampoule of vinesthene more than twelve hours after it has been opened. For longer anæsthesia, another ampule may be used, and it has been recommended that oxygen should be given through an Eustachian catheter hooked round the mouth under the mask.

For major operations chloroform should never be used, but gas and oxygen with suitable pre-medication, using a smaller Magill's bag for re-breathing.

3. *Combination Anæsthesia.*—This is general anæsthesia combined with local anæsthesia, and is an application of Crile's anoci-association technique for the diminution of surgical shock. He considers that shock is mostly due to the cerebral effect of peripheral stimulation—anæs-

thesia merely preventing the response of the patient to the stimuli.

Rough handling of peripheral nerves is certainly a cause of reflex shock, and therefore difficult operations and nervous patients afford two very good indications for the use of this type of anæsthesia. The following case will serve as an example : An impacted lower 8 is to be extracted ; omnopon gr. 1/3 and scopolamine gr. 1/150 are given one hour before the operation, induction is with gas and maintenance with gas and oxygen ; a local injection is given—some say a mandibular is not necessary—and the operation is performed.

The technique is said to absorb the advantages and dispense with the disadvantages of both methods.

POST-OPERATIVE CARE

There are only two times when a dental prop should be removed from the mouth : when the patient is anæsthetised and when he is conscious, *not* when he is coming round.

It has already been mentioned that it is essential to hold the jaw forwards and so keep the tongue from obstructing the airway ; similarly when the dental surgeon has finished his work, the anæsthetist must maintain the airway by thrusting the patient's head forwards so that no blood or foreign body is expirated. The sponge is removed by pulling on the tape provided, and the anæsthetist must satisfy himself that the pertinent number of teeth can be accounted for ; " missing " teeth have been seen to appear from the surgeon's sleeves, or to have shot yards away.

Although the thought that the dental surgeon has a recovery room for one's use may not be very encouraging to the patient about to undergo the ordeal of a general anæsthetic, yet it is a comfort to the anæsthetist and a safeguard to the practitioner, and will be appreciated by the patient later.

The same instruction as is given after local anæsthesia regarding the care and hygiene of the sockets should be given to the patient.

COMPLICATIONS

1. Vomiting is stated by some authorities to be due to the shallowness of the anæsthesia ; other factors such as the time, quantity and quality of the last meal are also important. It has been found that blood sugar figures on some children give surprisingly low figures during anæsthesia, *e.g.*, .03 mm. grm. per cent. (instead of .08—.10), and the glycopœnic child is a notorious vomiter at the slightest provocation. This again stresses the importance of pre-operative glucose, especially for children. This bolstering-up of the liver glycogen is used extensively in general surgery as a pre-operative measure.

2. Post-operative pain.—This is one of the disadvantages of an anæsthetic with a short " hangover " effect, and may be avoided by premedication as mentioned earlier, or the post-operative use of medinal gr. 7 gs., aspirin gr. 7 grs.

3. Hæmorrhage.—The anæsthetic used has some bearing on this. Gas and oxygen raise the blood pressure, so that hæmorrhage may be expected at the time of operation ; pentothal, evipan, avertin, shock, and asphyxia all lower the blood pressure, so that there may be bleeding some time after the operation, when the blood pressure has risen, *i.e.*, reactionary hæmorrhage. The pre-operative use of calcium has been mentioned, and it may be given as Calzana tablets, 2 t.d.s., or calcium lactate gr. 15 by mouth during the week preceding the operation.

By far the best treatment for a bleeding tooth socket is to insert a sterile salmon gut stitch through the gum using a modified mattress suture devised to utilise the maximum depth of tissue. If the gum margins are œdematous, the stitch may not hold, and packing may be necessary, but should be avoided if possible as it opens up the socket, though, of course, coagulation is encouraged by the presence of the gauze as a foreign body. Tying in the pack has been described, but should only be necessary in extremely stubborn cases. Gauze may be soaked in 1/100 adrenalin. Dilute snake venom from the Russell viper is advocated by authorities and may be obtained from Burroughs, Wellcome & Co., as Stipven ; also Hæmoplastin, Coagulin Ciba or horse serum.

4. Nitrous oxide overdosage.—Some patients complain of fatigue, vertigo, faintness, nausea and sleeplessness, which are considered to be due to anoxæmia. To obviate this some surgeons limit chair-side technique to extraction of not more than six teeth at one visit, and anæsthesia of not more than five minutes. Although it may be exhilarating to see teeth " fly through the air with the greatest of ease " from the point of view of shock to the patient from multiple extractions and difficulty in the maintenance of smooth anæsthesia, the practice would seem to be contra-indicated. One of the senior physicians of Guy's allows all the teeth to be extracted at one sitting after a double scale and clean. The patient, however, is confined to bed as a rule.

5. Rarely, cases have been described of blindness lasting for two to three days following gas.

6. The aspiration of foreign bodies is an extremely serious complication. A tooth or metallic filling will give a shadow on the X-ray—which should be done at once if the condition is feared, and a surgeon with experience of bronchoscopy consulted.

7. Cardiac failure and syncope is *the* danger of ethyl chloride overdosage. The child remains pink until the sudden onset of pallor, flaccidity, inactive and dilated pupils, shallow respiration and an almost imperceptible pulse. The heart stops almost as soon as the respiration. It is interesting to note that in a series of operations under various anæsthetics 79 per cent. showed some abnormality of rhythm—the commonest being extra systoles.

8. Respiratory failure usually precedes the former complication fortunately, and this is one of the reasons why vinesthene is considered to be safer than ethyl chloride.

RESUSCITATION

1. *Respiratory.*—In mild cases 95 per cent. oxygen with 5 per cent. CO_2 (it should be remembered that CO_2 is a pure asphyxiant). Positive inflation of the lungs with oxygen and, in more severe cases, hypodermic injection of strychnine gr. 1/32-1/8 should be given, and Howard's method of artificial respiration instituted in the chair, each cycle of movements taking five seconds, or Schaffer's method with the patient lying face down on the ground. Alpha lobeline has a direct action on the respiratory centre and should also be given.

2. *Cardiac.*—Intravenous injection of coramine 5 c.c. There is a case reported where a heroic dental surgeon opened the abdomen and performed cardiac massage; the patient died—we hesitate to advocate this method. Children should be held upside down by their heels and given coramine 3 c.c. and artificial respiration if necessary.

3. *Peripheral Stimulation.*—A surgeon of this hospital has been known to use digital dilatation of the anus in the operating theatre. It is obviously essential to have a sufficient supply of coramine, strychnine, CO_2 and oxygen at hand. One dental surgeon enthusiastically had to ring up the Fire Brigade to bring round some oxygen quickly.

THE CHOICE OF ANÆSTHESIA IN SPECIAL CASES

1. Cases with cardiac disease stand anæsthesia well if there are no symptoms of failure. A smooth induction and no cyanosis are desirable. Patients with failing hearts should have premedication such as morphia gr. 1/5, atropine 1/120, and local anæsthesia or local and general anæsthesia combined.

2. *Gross Infection of the Mouth.*—Pre-operation treatment such as mouth washes of hydrogen peroxide followed by glycerin, borax and thymol, together with efficient scaling and cleaning, is necessary. Effervescent saline aperients and gastric lavage may diminish any attendant gastritis and diminish post-operative vomiting. Glucose should be given extensively before any major operation. Gas and oxygen is the anæsthetic of choice. Local infiltration is to be avoided, although it is claimed that Novotox may be used.

3. *Thyrotoxicosis.*—It is advisable to get these patients into a home and give omnopon and scopolamine and avertin, followed by gas and oxygen, or omnopon and scopolamine, gas and oxygen and local anæsthesia.

4. *Tubercle.*—Basal anæsthesia with gas and oxygen is advocated.

5. *Alcoholics* are difficult patients to anæsthetise, and if it is known that they play havoc under gas and oxygen, then evipan is advisable with plenty of local assistance.

6. *Diabetics.*—The premedication advocated is insulin 25 units and glucose 25 grms. by mouth four hours before the operation, using gas and oxygen.

7. *Pregnancy.*—The first and the last three months are not the favoured times, as in the first there may be shock and abortion, and in the last respiration is embarrassed by the size of the abdomen. Should teeth be extracted it ought to be done in the middle three months, and whenever an anæsthetic is given, full oxygenation should always be maintained. Gas and O_2 is the anæsthetic of choice.

These are but brief outlines, and all cases must be treated on their relative merits.

This is not intended to be a catalogue of the methods available, but rather a survey of those methods which have shown their worth at the hands of experienced men. Considerable detail has been given in some cases either because the methods described constitute the majority of dental general anæsthetics, or because it was considered essential that we should be conversant with the use of more recent methods or that we might give some answer to the examiners.

We should like to express our thanks to Mr. Marston for his help, the Librarian and his Assistant for their aid in determining the references which we have read, marked, learnt and inwardly digested, and have attempted to present in a readily assimilable form to-night.

Our thanks are due also to those manufacturers who have placed their apparatus and products for demonstration.

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Reviews

Carbon Monoxide Asphyxia. By CECIL K. DRINKER, Professor of Physiology and Dean, School of Public Health, Harvard University. Published by Humphrey Milford, Oxford University Press, London, 1939. Pp. 276 *Price* 25*s.*

THE opportunities afforded to Drinker of acquiring a vast and unusual experience on the subject of carbon monoxide have been unparalleled, for in addition to his academic status he acts as scientific expert to the American Gas Association. He has produced in this book a monograph of the very first water—a remarkable account, furnished with profuse statistics, of the medical, forensic, and industrial aspects of poisoning by this gas, and his claim in the preface that the book is intended to help men and women who have practical concern with the problems of C.O. asphyxia is amply verified by the text. Sections on the respiratory physiology and biochemistry, on acute poisoning and after-effects, the medical and industrial statistics, pathology, chronic exposure and treatment comprise the main bulk of the text. Each section is embellished with personal observations and trite comments which greatly increase its value; the book has a very considerable importance for these remarks alone, for their originality and their plain soundness. There follows a rather dry account of analytical methods of detection and measurement of the gas in air and in the body by Julius Sandroy.

We take especial pains to recommend this book to the physiologist, the biochemist, especially the industrial biochemist, and to the physician. To the medico-legal pathologist it is an urgent necessity. It is a book of very unusual calibre and interest. C. K. S.

Cancer: Causation, Prevention and Treatment. By A. E. BLACKBURN, M.D. Published by Messrs. H. K. Lewis & Co. Pp. 108. *Price* 6*s.*

THE value of this monograph is almost wholly ruined by the method of its presentation. The author's thesis is that cancer arises from the chronic suboxidation of tissue-cells. The factors tending towards anærobic metabolism are the supply of free carbon atoms externally (as in tar and soot cancer), or of fats of high molecular weight in cancer of the alimentary tract. Cancer of the penis is caused by the epithelial cells at the reflection of the prepuce being forced to live in anærobic conditions in close proximity to fatty smegma, and cancer of the breast results from pressure of clothing driving the fatty secretions back into the secreting cells.

This position is defended mainly on empirical grounds. Jews do not get penile cancer; women of tropical races who live unclothed above the waist do not get cancer of the breast. Cancer of the alimentary tract is rare in races whose consumption of animal fat is small.

But the logical discipline necessary for the enunciation of a theory of this kind is entirely lacking in this book. It is written in short disjointed paragraphs, in which statements of fact are mingled with dogmatic interpretations, and the reader is often in doubt as to the author's exact meaning owing to the obscurity of his prose.

Wide generalisations are based on quite inadequately controlled statistical evidence, and interspersed in the text with instances of recent experimental research we find exiguous and rather old-fashioned comments on treatment. There are no references whatever.

After reading Dr. Blackburn's 106 pages, one is left with the impression that he has something

to say which, had it been said well, might have been of great value. One feels that he is very probably right in much of what he says, but to command respect in scientific argument it is not enough to be right; one must be convincing.

W. D. B.

Physicians' Fare. By C. G. LEAROYD. Published by Messrs. Edward Arnold & Co. Pp. 301. *Price 7s. 6d.*

THIS is a book of short stories, and they are excellent. That they are written by a doctor is evident, and in a few the point would not be easily taken by anyone not medically educated. Dr. Learoyd has the power to make a character in a few sentences, to make a situation, and to combine the two in a good story, and where his writing lacks the suavity of the professional it gains in imaginative force, for he has not learnt to dilute his talent.

The stories are based on a varied experience. Country practice, student life in hospital, consultant practice in Harley Street, and institutional life in asylums and sanatoria form their background, but it is not difficult to see that the first is the author's choice. He is, as he says of one of his characters, a field-naturalist of a doctor. He has a refreshingly biological point of view, looking at disease from the bacteria's and the patient's angle as well as the doctor's, and he exploits to the full his right, under cover of fiction, to expound his own scientific theories.

In a wholly admirable way Dr. Learoyd manages to effect a compromise between the dogma of modern psychology and a wide experience of human affairs. Some of the best stories have a psychological flavour; a macabre one about an asylum run for profit; a humorous one about a psychologist who writes letters to six patients saying exactly what he thinks of them, and later discerns without dismay symptoms of an obsessional neurosis in himself; and an exceedingly sympathetic one, called "Retreat," in which the psychologist attempts to describe the nature of schizophrenia to a man in whose son he has just diagnosed the disease.

However this book is received by the world, it is certain of success amongst the profession from whom and for whom Dr. Learoyd writes with such wisdom and humour. In a Foreword it is stated that most of the stories are reprinted from the *St. Thomas's Hospital Gazette.* Our contemporary is to be envied for having captured so captivating a writer.

W. D. B.

Hospital Information, etc.

Pass List

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

April, 1939.

Surgery.

*J. A. L. Leeming.

Midwifery.

W. N. Vellacott.

* Has completed the examination.

Papers by Guy's Men

Macintosh, R. R. Paraldehyde poisoning treated in a Both respirator. *Brit. Med. J.*, 1939, i, 827.

Campbell, Maurice, and Another. Paroxysmal tachycardia; Ætiology and prognosis of one hundred cases. *Brit. Heart J.*, 1939, i, 123.

Campbell, Maurice. Angina pectoris following a crushing accident. *Ibid.*, 177.

Ogilvie, W. H. Recent advances in surgery. *Bristol Med.-Chir. J.*, 1939, lvi, 37.

Appointment

Geoffrey M. Housden, F.R.C.S., Hon. Surgeon to Leominster Hospital; Hon. Surgeon to Tenbury Wells Hospital.

Change of Address

Eric J. Greenwood, M.B., F.R.C.S., "Lockington," 22, Maidstone Road, Rochester.

G. M. Housden, Dutton House, Leominster, Herefordshire. *Leominster* 42.

Marriages

CURTIS—FINNIS.—On April 22nd, 1939, at St. John's Church, Redhill, Frederick John Curtis, son of Mr. and Mrs. Frederick Curtis, to Suzanne, elder daughter of Paymaster-Commander and Mrs. Steriker Finnis, of Shirley, Redhill.

Birth

HODGSON.—On April 21st, 1939, at 27, Welbeck Street, W.1, to Hildegard, wife of W. Archer Hodgson, L.D.S., R.C.S.—a son (Graham).

Deaths

ORIEL.—On 2nd May, 1939, George Harold Oriel, M.A., M.D., M.B., B.Ch.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

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PASSIM

THERE is a French proverb which states that he who knows, knows how to say what he knows. Taking this proverb as his guide, anyone with some acquaintance of medical and scientific writing might draw uncomplimentary conclusions about medical and scientific writers. For many authors of medical papers and textbooks, though presumably they know what they want to say, yet do not seem to know how best to say it. Their prose is overburdened with medical jargon, their sentences made cumbersome with a host of commas and conjunctions.

They fall into the simpler traps: "The surgeon then places the patient's flexed leg against his perineum, and folding his arms beneath the upper part of the leg, exerts vigorous upward traction, etc. . . ." (from a surgical textbook). To whom the perineum and the arms belong is not altogether clear.

Awkwardness of expression flourishes. The meaning, if one looks for it, is obvious, but it is not clearly expressed in the text. "Tuberculosis does not occur primarily in the tongue, but is usually a secondary infection in adults who are suffering from laryngeal tuberculosis or advanced phthisis owing to the bacilli present in the sputum, which infect the surface of the tongue through some abrasion" (from another surgical textbook). From the text it would seem that the bacilli in the sputum caused "the laryngeal tuberculosis or advanced phthisis."

A common fault is excess of words. "Hyperacidity is common in cases of gastric and duodenal ulcer, but the absence of this factor does not make the diagnosis necessarily negative" (from a nursing textbook). The second half of this sentence is so much more easily written, "but is not always found." And anyway, hyperacidity is a Græco-Roman bastard and should read "hyperchlorhydria," and, though a diagnosis may be wrong, it may not be negative.

Examples of bad or obscure writing might be multiplied. The most brilliant research does not escape it. "The posture maintained in decerebrate rigidity resembles "standing" in that it presents a continuous (postural) contraction of the greater share of all that synergic system of muscles which by equipoising gravity in the erect position executes and maintains the standing attitude" (from a book summarising research in neurophysiology). Certain research workers even acquire reputations for the unreadability of their papers.

An enormous number of pages are written every year on medical subjects. Fortunately the majority of us have to read only a few of these myriads. But we who read have the right to demand that what we read should be simple and intelligible. The meanings of textbooks, monographs and original papers should be clear on a first reading, unless the complexity of the subject prevents this. It is a waste of time to be forced to read and re-read a chapter in order to decode the author's message. That it is by no means easy to write simply and clearly we admit, but if this difficulty should deter some few from rushing their researches and books into print, we should be only too grateful. If the author of medical text should present us with his information pleasantly written, easy to read, and so clearly set out as to penetrate the thickest skull, we promise to buy his textbook or read his paper. Though, on second thoughts, perhaps we shall miss those rare and delightful pearls of speech that abide among the disjointed and difficult sentences of science, such as the statement of the American physiologist in his scholarly and measured review, that "parathyroidectomy in cats

is commonly responsible for a bloody offensive diarrhœa." Perhaps he knew.

WE print below a statement received from an organisation known as the Medical Peace Campaign. It is addressed to members of the medical profession throughout the world, so that they, if they so desire, may support its proposals and use their influence to see that they are put into effect. Its high spirit, as much as the signature below it, will recommend it to the serious consideration of our readers :—

" *Statement from the Medical Peace Campaign to members of the Medical Profession throughout the World.*

" Realising the suffering and disease which are caused by war, and accepting our medical responsibility to prevent disease as well as to treat it when developed, we urge the Governments of the world to take action to make war impossible.

" In particular we suggest that, in order to combat the present emergency, Great Britain, France and Russia should declare that they stand united and determined to resist all further aggression by military force if necessary ; and that the Governments of these countries should invite all other countries, irrespective of their form of government, to associate themselves with this declaration.

" We maintain that the only way to eliminate all possibility of future war is the establishment of the rule of international law, based on the principles of justice to all, and becked, so long as this remains necessary, by overwhelming military and economic strength. To this end we urge that a conference be called to discuss the practical measures which should be taken.

" Finally, as an organisation representative of medical opinion and regarding medicine as the most international and humane of all professions, we would remind our colleagues in all countries of the great part which they may yet play in influencing public opinion on behalf of peace.

" Signed on behalf of the Medical Peace Campaign,

" JOHN A. RYLE,
" *President.*"

TO-DAY we part company with Mr. Ogilvie in America. Almost a year ago we crossed the Atlantic with him, and since then have enjoyed the *entree* into any American medical organisation and the intimate company of the surgically great. Our thanks are due to him both for the rich collection of surgical experience that we have gained and for the personalities with whom we have become acquainted through his kindly but penetrating analyses. Not least, we have become acquainted with the author, by travelling with him, for every diarist must present implicitly his own nature while he is describing men and affairs around him.

NO Guy's man can have forgotten Mayhew, who retired from his position as porter at the Front Surgery a year ago. He has contributed an article of reminiscences which appears on another page of this issue. As you read it, see if you are not swept back to the Surgery of your time, whether the present one or the old one of the Front Lodge.

Chronic Gastric Ulcer

A Clinical Lecture delivered at Guy's Hospital on 19th March, 1939, by E. G. Slesinger, Esq., O.B.E., M.S.

GENTLEMEN,—Many of the problems concerning gastric and duodenal ulceration are common to both conditions, but certain factors concerning diagnosis, prognosis and particularly treatment make it desirable to consider chronic gastric ulcer by itself.

Fortunately for our interest few problems of medical or surgical treatment are static. As new facts come to light or old ones are freshly correlated, methods of treatment based on them, or thought to be based on them, are brought forward, to be retained or discarded in the light of experience. Our interesting duty is to follow such changing methods with thoughtful appreciation, bearing in mind that uncritical acceptance of what is new is as undesirable as unwillingness to discard what is old. In few fields of medicine has the pendulum of treatment swung more widely than in the case of gastro-duodenal ulceration. As regards duodenal ulcer the swing to-day is away from surgical treatment to medical treatment. In chronic gastric ulcer on the other hand it is reversed, and it is mainly the justification of that reversal that I wish to discuss to-day.

Chronic gastric ulcer is about one quarter as common as duodenal ulcer, and occurs more frequently in men than in women, though the disparity is less marked than in duodenal ulcer. It tends to occur in somewhat older patients than does duodenal ulcer, particularly in men, a point

of some importance in that differentiation from carcinoma is sometimes difficult.

SYMPTOMS

The symptoms of gastric ulcer in at least a third of the cases are so similar to those of duodenal ulcer that it is not possible to diagnose the site of the lesion from the history alone, and in this group neither the test meal nor a physical examination afford much further help, although the diagnosis of ulcer, without differentiation as to site, may be quite clear. On the other hand, certain gastric ulcers produce irregular and atypical symptoms not often found with duodenal ulcers, and therefore of the two conditions it more frequently escapes recognition.

The onset is insidious, pain occurring after some meals or after some food and not after others. The pain, however, gradually increases in frequency until it occurs after every meal, though it may still be affected by the nature of the food and may be absent after a milk meal. It is described as a burning pain, often very severe, and is generally felt high in the epigastrium to the left of the mid-line. Radiation usually indicates adhesion of the ulcer to other structures, and pain may be felt through to the back, in the thorax, or in the left interscapular area. The pain generally begins half an hour after food, although in the rare cases situated near the cardia it may begin before the meal is over. Belching relieves the pain and vomiting stops it at once. Vomiting frequently occurs spontaneously when the pain is at its height, and sometimes is self-induced by the patient as a relief to his pain. Food does not produce relief of pain as it does in duodenal ulcer, or at any rate not nearly to the same extent, and while alkalis relieve to some extent, sodium bicarbonate is by far the most effective, by reason of the belching it induces. The symptoms of chronic gastric ulcer tend to persist for longer at a time than do those of duodenal ulcer; that is to say that the periods of complete freedom from symptoms which are so characteristic in duodenal ulcer do not occur, although there may be periods of abatement in the severity of the symptoms. Hæmorrhage of some kind almost always accompanies gastric ulcer. In most cases it is present as occult blood in the vomit and the stools, and in about a quarter of the cases an actual hæmatemesis occurs. Although Hurst and Ryle have stressed the rarity of death from a first hæmatemesis, the experience of the L.C.C. institutions to which so many of these cases are admitted, shows that in patients over forty, and especially men, death from a first hæmorrhage is, unfortunately, not uncommon.

The test meal is not of the same significance in ulcers of the stomach as it is in the duodenum. Moderate hyperchlorhydria is common, but in the more chronic cases acid may be below normal or absent. X-rays are of great value in diagnosis, the characteristic feature being the presence of a niche at the site of the ulcer base. It is rarely that an experienced radiologist is unable to demonstrate the presence of a niche, and without it the diagnosis of gastric ulcer is not justifiable.

The differential diagnosis of chronic gastric ulcer falls roughly into three groups. Firstly the differentiation from duodenal ulcer, secondly from other gastric lesions, particularly carcinoma, and thirdly from extra-gastric conditions producing gastric symptoms.

The diagnosis from duodenal ulcer is often difficult or impossible without X-rays. The earlier occurrence of pain, the absence of typical hunger pain and food relief, the presence of vomiting, and of pain and tenderness to the left of the mid-line, together with absence of a history of periods of freedom from symptoms are suggestive, but the final differentiation must rest on X-ray evidence of the presence of a niche. In this connection it must be remembered that in a small percentage of cases both gastric and duodenal ulcer are present in the same patient.

In the diagnosis of ulcer from other organic lesions of the stomach the most important differentiation is from carcinoma.

Syphilis, tuberculosis, diaphragmatic hernia or innocent tumours of the stomach are rare causes of confusion. In regard to carcinoma, two separate problems exist. In the first place is the recognition of primary carcinoma from ulcer, and in the second the recognition of malignant change occurring in an established gastric ulcer. Considering that only about one in four cases of carcinoma of the stomach which come to operation are operable and that the prognosis of those which are removed is exceedingly bad, it is apparent that the earliest possible recognition of carcinoma is essential if any improvement in results is to be obtained.

The differentiation between ulcer and cancer is sometimes very difficult in the early stages, and the policy of delay in reaching a decision is so disastrous that every effort must be made to reach a correct decision at the first possible moment. In the first place the recent onset of dyspeptic symptoms in patients over forty with a previously normal gastric history should always be suspected as cancer until proved otherwise. Further, the presence of a dull ache rather than the usual acute pain, which is aggravated by taking food rather than relieved by it, is suggestive of carci-

noma, as is loss of appetite, nausea, and anæmia in the absence of gross bleeding. In the test meal hypochlorhydria or achlorhydria is commoner in cancer, though both may be present in ulcer, although generally only in old standing cases. On the other hand, normal acidity or even hyperchlorhydria is occasionally present in cancer. Gastric retention occurs earlier and is commoner in cancer than in ulcer. X-ray evidence in the early case can also be misleading. Prepyloric lesions, or those on the greater curvature, are more liable to be malignant, as is on the whole the ulcer with a large niche. Gastric retention occurs earlier and more frequently in carcinoma than in ulcer, and the persistence of occult blood on a non-meat and ulcer diet is always suggestive of carcinoma.

The recognition of carcinoma developing on ulcer is seldom possible before operation, except in late cases, and even at opreation naked-eye recognition of the change is often difficult or impossible. Since the prognosis of ulcer cancer is, if anything, even worse than that of primary cancer, the only chance of improving the situation is the acceptance of the principle that medical treatment should only be persisted in for a fixed and limited time unless rapid improvement takes place, and that if it does not, surgical intervention must be prompt and thorough. Since it is recognised that the relatively uncommon prepyloric ulcer is more liable to undergo malignant change than are ulcers elsewhere, and since, in addition, prepyloric simple ulcer is not infrequently diagnosed in what is really a primary cancer, it is doubtful whether it is wise ever to treat ulcers in this situation medically, when surgical treatment will not only avoid both mistakes, but in this situation carries very small risks.

There is not time to discuss the differential diagnosis of the many extra gastric lesions which may simulate ulcer, but it is well to remember that while both appendicitis and cholecystitis come into this category, one or both of these lesions is not infrequently coexistant with a gastric or duodenal ulcer, and that failure to recognise and treat them may be the cause of failure of the treatment directed to the gastric ulcer.

COMPLICATIONS

The chief complications of a gastric ulcer are : (1) perforation, (2) hæmorrhage, (3) hour-glass contracture, and (4) malignant transformation. Pyloric obstruction seldom follows gastric ulcer except occasionslly in prepyloric lesions, and even in these is more often due to inflammatory swelling than to cicatrisation. Perforation of an ulcer is a catastrophe calling for immediate surgical treatment, and as it has problems of its own calling for separate consideration, I do not propose to discuss it here.

Hæmorrhage of some degree, as evidenced by the presence of occult blood, accompanies all gastric ulcers, but when we speak of hæmorrhage as a complication we mean of course massive hæmorrhage. In the majority of cases the blood is vomited and is later accompanied by melaena, but occasionally melaena occurs alone, though less often than in duodenal ulcer. The bleeding will vary from a small amount to a severe loss, which exsanguinates the patient. Hurst has pointed out that a first hæmorrhage rarely kills the patient, and although this is true in regard to young patients, in men over forty, whose vessels are arteriosclerotic, I have seen a number of cases in whom the first bleeding proved fatal. In spite of that, with the possible exception of patients coming into the above group, I believe the risks attached to conservative treatment of a first hæmorrhage are less than those of operation, and I do not practise it. Certain surgeons, however, following Finsterer, of Vienna, advocate operation, chiefly partial gastrectomy, in the treatment of primary hæmorrhage.

On the other hand, recurrent bleeding from a gastric ulcer is a definite indication for surgical treatment, since it is, in itself, evidence of the failure of medical measures.

Hourglass contraction is a rare complication of gastric ulcer which, curiously enough, occurs almost entirely in women. It usually follows healing of a very chronic ulcer, and probably represents repeated ulceration and scarring. It is important not to mistake the spasm frequently associated with ulcer for hourglass contraction, and in suspected cases a second X-ray should be taken after the patient has been given full doses of belladonna which will abolish the spasm. The treatment of hourglass contracture is surgical. Partial gastrectomy is the operation of choice, but gastro-enterostomy to the proximal pouch is sometimes called for if the risk of gastrectomy appears large, and gives good results. The operation of gastro-gastrostomy, which at one time was popular, should not be performed, as it interferes too much with the motor function of the stomach. The question of malignant transformation of gastric ulcer is one about which much controversy rages. Figures varying from 0 to 90 per cent. have been given from different clinics. Certain facts are, however, clear. In the first place ulcer cancer is a definite entity, although opinions vary as to its frequency. Secondly, all observers are agreed that prepyloric ulcers are more liable to undergo malignant change than ulcers elsewhere.

Thirdly, there are no known criteria other than the histological by which the exact nature of a given ulcer can be determined. In a series of operations for gastric ulcer, Finsterer found 20 per cent. to be malignant, and observations on the history of a number of patients dying of cancer of the stomach shows the presence of a long ulcer history in some 12 per cent. of cases. The difficulties of forming an accurate estimate of the likelihood of malignant change in a gastric ulcer are great, and it is probably less than the figures I have given suggest, but it must not be forgotten that a number of early carcinomas of the stomach are diagnosed as ulcer for a time and treated medically with disastrous consequences.

TREATMENT

The treatment of gastric ulcer, like that of duodenal ulcer, has passed through a series of changes during the last thirty years. At first almost entirely medical, the work of Moynihan, the Mayo's and others not only developed the surgical treatment of ulcer, but it should be remembered that surgery also entirely revised the conception of the incidence and symptoms of the disease.

Later Sippy was mainly responsible for the revival of the medical treatment of ulcer, and, as you know, Sir Arthur Hurst has done much to popularise and develop medical treatment. Gastric ulcer, however, differs from duodenal ulcer in several very important respects which influence the choice of the type of treatment to be adopted. In the first place, there are no sure criteria at present by which an ulcer on the gastric side of the pylorus can be distinguished for certain as innocent or malignant. Secondly, there is always the possibility that a gastric ulcer, innocent at first, may, especially if it is prepyloric in position, become malignant. Thirdly, the response of the chronic gastric ulcer to medical treatment is neither as quick nor as likely to be permanent as with duodenal ulcer. Lastly, the risks of complications such as jejunal ulcer arising after surgical treatment are much less than in the case of duodenal ulcer. The reason for this is partly that severe degrees of hyperchlorhydria such as are commonly met with in duodenal ulcer are uncommon in gastric ulcer, and secondly, that, as Hurst has shown, whereas after partial gastrectomy for duodenal ulcer, achlorhydria results in only 50 per cent. of cases, in similar operations performed for gastric ulcer achlorhydria results in almost 100 per cent.

There are, I think, few attitudes of mind more stultifying to progress in clinical medicine than that which adopts an attitude of "always" or "never" in considering the choice of alternative methods of treatment. The individual is, and always must be, greater than the disease, and every individual case must receive separate consideration and the treatment advised must bear a relation not only to his lesion, but also to his individuality, his surroundings, his manner of life, his mentality, and even to his choice. Bearing that view in mind, therefore, I would stress that there is no routine treatment for gastric ulcer, and I shall therefore content myself with giving you the indications which, in my opinion, make surgical treatment desirable in any given case.

Firstly, perforation of an ulcer calls for immediate surgery, the mortality being directly proportional to the time elapsing between perforation and operation.

Secondly, hourglass contracture, whenever it is proved to be organic and not spasmodic in character.

Thirdly, a second or subsequent hæmorrhage from a gastric ulcer when the patient has been medically treated for the first hæmorrhage.

Fourthly, all cases of prepyloric ulcer, because of the liability of such ulcers to malignant degeneration, the impossibility of diagnosing between carcinoma and peptic ulcer in this situation, the disastrous results which may follow the delay of a trial medical treatment if the lesion is a cancer, and the minimal risk of surgery for ulcers in this situation.

Fifthly, in cases with a recent history occurring in patients over forty, because in such cases again the diagnosis between ulcer and cancer is frequently impossible except by the method of trial medical treatment, and the delay involved, even though only a matter of weeks, may gravely affect the chance of eradicating a malignant ulcer. Further, the chances of hæmorrhage or perforation in such patients are greater, as are their dangers if they occur.

Lastly, surgical treatment should be adviced if symptoms recur after a thorough course of medical treatment given in bed under the care of a competent adviser and provided adequate post-ulcer treatment has been adhered to. It should also be advised if such symptoms as occult blood in the stools, or pain persist after proper medical treatment in bed for three or four weeks, as in such cases the probability is that the ulcer is malignant, and partial gastrectomy should be undertaken, since even to naked-eye appearance such ulcers may seem simple.

Pyloric obstruction hardly ever follows gastric ulcer, but, of course, if it does it calls for surgical treatment. As will be seen from the above list of indications, in my view surgery is indicated in a

very considerable proportion of cases of gastric ulcer, possibly amounting to 75 per cent. of cases, whereas in duodenal ulcer the indications are far fewer.

OPERATION.

Once surgery is decided on the even more difficult decision of the type of operation to be performed has to be considered, and here again it must be emphasised that no single method is suitable to all cases.

As far as can be seen at present, partial gastrectomy is, other things being equal, the method of choice. Its advantages are wide removal of the ulcer, and the resultant achlorhydria which, in the case of gastric ulcer, invariably follows. The larger the lesion in the stomach is the more desirable is partial gastrectomy. On the other hand, when the ulcer is adherent to pancreas, liver, or both, the operation may be difficult, or at first sight almost impossible. Careful mobilisation of the stomach, however, often renders such removals far easier than appeared possible at first, and the greater the experience of the surgeon, the more often does he find himself electing to perform gastrectomy.

On the other hand, the supreme test of the clinical acumen of a surgeon is his ability to judge correctly the extent of the operative interference which any given patient will stand with safety. In some cases, either owing to the technical difficulties associated with the ulcer, or to the poor general condition of the patient, partial gastrectomy may carry with it an increased hazard to which the careful surgeon will not subject his patient. In such cases there are five alternative procedures to which I would call your attention. Many other operative measures have been tried and discarded in the light of experience, but, while admitting that partial gastrectomy remains the method of choice, the following procedures have a definite place in the treatment of gastric ulcer which is justified by their results.

Wedge resection of the ulcer, with gastro-enterostomy, is particularly suitable for the small lesion in the poor-risk subject. It allows of microscopic examination of the specimen, is a less severe operation than partial gastrectomy, and, if limited to suitable cases, gives good results.

In some patients in whom excision is not feasible and gastrectomy inadvisable ;—the type of ulcer with a large fixed crater in a poor-risk patient, cautery excision of the ulcer with gastro-enterostomy is a useful operation. It is quick, simple, and safe, and if the ulcer is thoroughly destroyed the results are as good, and far safer, than any other method which can be applied to the type of case in question. Partial gastric exclusion is another operation which has a definite field of usefulness in the surgery of gastric ulcer, either by itself or as the first stage of a two-stage operation. In this operation the stomach is divided proximal to the ulcer, and the lower end is closed, the ulcer being left undisturbed. The upper end is anastomosed to the jejunum by any of the suitable methods. This operation is even more satisfactory than jejunostomy in giving rest to the ulcer since not only is it protected from all food irritation, but also from the secretion of the glands of the fundus. In cases with large saddle ulcers running up to and sometimes even involving the cardia, jejunostomy may be the only feasible means of giving surgical relief.

Lastly, in the very occasional case in which an elderly or frail patient, the ulcer is found associated with a condition of acute inflammation and œdema of the surrounding stomach wall, resulting in considerable obstruction, gastro-enterostomy alone will give marked help. This type of case occurs very rarely, but if met with any procedure in excess of a gastro-enterostomy is almost certain to result in disaster, whereas by simple gastro-enterostomy it can often be safely relieved.

Finally, I would stress that, whatever operation is undertaken for the relief of a gastric ulcer, the operation itself is only an incident of treatment, and must be followed by strict post-operative dietetic care if good results are to be achieved. In no disease is co-operation more essential between physician and surgeon, and in trying to show you to-day the part which surgery can and should play in the management of gastric ulcer, I do not wish to minimise in any way the even more important functions of the physician in the treatment of this distressing condition.

Forty Years in the Front Surgery

By Mr. W. S. Mayhew

HAVING been asked by the Editor to give my reminiscences of the Front Surgery, since I last wrote in 1926, I will endeavour to do so again.

Concerning the patients, there is a vast difference; no doubt the public-houses closing early is responsible for the change. The L.C.C. still bring in all sorts of patients, some with very

trifling complaints. The Hospital patient has also greatly improved; they are more orderly and do not mind being told what to do and where to sit to wait for attention. In the old days it was nothing to get black eyes occasionally, and all sorts of other trouble with them, but that is all now a thing of the past. Cases still come in from various doctors, and when they are Guy's they always diagnose the right trouble, which says much for the Hospital training, and also the doctors.

Strange things happen sometimes. I remember one such case in which a policeman was concerned. This policeman was called "Flash Harry" by his mates, and was a very comical man. One Sunday, very early, he brought in a case. When asked what it was said: "You just wait until I get her in, then I'll tell you." When the woman was made comfortable he told us she had collapsed at the Elephant and Castle; he himself had delivered her of her trouble and rushed her up to Guy's for further treatment. His instruments were very rough—just a penknife and a piece of string, but I am pleased to say everything turned out all right. I heard later that Scotland Yard well rewarded him for his prompt action, which was very good of them.

While mentioning this case; only a short time ago a Front Lodge porter and myself were taking a woman to Victoria Ward post haste. Mid-way between floors the lift stopped, and the child was born on top of the trolley. We therefore opened the lift door at the top, took the trolley off, and carried her to Victoria and to safety. The baby was so pleased it sang as loudly as it could all the way, to be sure of a welcome at its journey's end.

Being asked about old doctors, I remember many of them by name. There was Sir Cooper Perry, Mr. Eason, Dr. Taylor, Mr. Jacobson, Dr. French, Mr. Dunn, Mr. Thompson, Dr. Campbell, Dr. Poulton, Dr. Golding-Bird—who, by the way, had a bird in a frame called "Golding-Bird," which was polished up every day to look like gold (not the bird, but the frame), in Luke Ward.

During the War we had a very busy time and, like most other places, were short-handed. I often did twenty-four hours right off, for we had terrible cases through the air raids, being brought in at all hours of the day and night. The last raid over South London was very serious, and I think we had most of the cases at Guy's, from Albany Road, Camberwell, Avondale Square, Old Kent Road, etc. One old gentleman from Avondale Square was very funny about being raided. He told me he was asleep and, through the noise of the raid, woke up to find the stars in the Heavens shining down on him, welcoming him to come home to his Lord.

We were very short of externs during the War, and at one time there was only one to go out. He, unfortunately, could not ride a bicycle, so the poor nurses as well as himself had to walk; it was a great strain on them all, especially as they were never sure about getting to their journey's end in safety. On one return journey they found an unfortunate woman who had been hit by the raiders in St. Thomas's Street; they carried her in with them. She went to Lydia Ward and recovered, thanks to the skill of Guy's doctors.

While writing, I might mention about the old Out-Patients. In the old days we used to enter from the Medical Block and walk along wooden floors to the dispensary, which remained open until 11 p.m. every night, and generally we were very busy.

The Massage Department of those days was in the Park, and was run by one nurse. Things are very different now. There are large, airy rooms, very comfortable, with a full staff of nurses in attendance, who make the patients feel at ease and so forget for a time their sufferings.

Many years ago we had a surprise visit to the Hospital. His Majesty King George V and Queen Mary honoured us with this visit. They also came along to the Surgery, and seemed very pleased with all they saw. Before leaving, I had the honour of shaking hands with the Queen.

There is a great change in the Front Surgery, which has been extended to almost twice its size and brought right up to date.

I must say, in conclusion, that in all the forty years I was there, with all the many changes of doctors, sisters and nurses which naturally take place periodically, I found them all very just, considerate and kind, and got on, I think, very well with them all—at least I tried to.

I might just add that, in all that time, whether duty was, as in the old days, twelve hours right off; or, as now, eight hours, I was never once late.

So ends forty years' service with Guy's Hospital.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

American Journey

A Diary by W. H. Ogilvie, Esq., M.D., M.Ch.

EPILOGUE

I SHOULD like to repeat at the end of my journey the explanation that I made at the beginning.

These notes were jotted down in trains, restaurants and hotels, usually in a hurry, often late at night when I was tired and had an early start next day. They were intended to preserve, for my own future use only, the impressions of my visit, and because I wished to record the reactions of the moment I often criticised what I had seen and allowed the praise to be inferred from the description. Had the diary been published in any other than a hospital journal I should have written it afresh, but I hope that even in its rough state it has given the impression of a pilgrimage full of profit, of scientific and progressive surgery, of a kindly and generous people.

The good American is courageous, independent, self-sufficient, distrustful of tradition, a pioneer by instinct, able to make quick decisions and to act upon them. He has also a genuine sympathy for his fellow men, particularly if they are ill or down on their luck. When a man of this stamp undertakes surgery under ideal conditions, in theatres beautifully built and lit, helped by expert anæsthetists, assisted by a large team of skilled graduates and served by a theatre sister straight from heaven, his work is such as to fill the visitor with admiration and envy.

The great men in American surgery are operators of a standard that could not be surpassed anywhere, but in a visit of this sort it was inevitable that I should see poor technique as well as inspiring work, and that some of the well-known names should prove disappointing. The factors that favour good work in America are self-evident; two adverse ones deserve comment.

One is the remarkable lack of any individuality in instruments. The tendency of the country is to mass production, and mass production gives everybody goods of admirable finish and appearance and of remarkable quality for their price, but it militates against personal adaptation and fine workmanship. The surgical instruments in most American theatres are of a simple standard type, usually German factory goods produced from stampings and imported wholesale, and the selection is remarkably limited; for instance, in several hospitals one sees gall-bladder surgery undertaken without any angled forceps. There is no firm comparable to Downs, specialising in high-grade craftsmanship and individual work.

The second factor, that I class as adverse only with considerable hesitation, is the Halsted tradition. Halsted was one of the giants of the last generation and, like many great men, he left behind him admirers rather than followers, much in the same way as MacEwen sterilised the surgery of Glasgow for a generation. Where these men worked one finds a tendency to treat their "footprints on the sands of time" as shell-holes to be defended against all comers and re-excavated when they crumble, rather than as an indication of the direction in which they were travelling, of the path they were tracing when they fell, one to be followed to its end or as near it as each explorer can get, leaving the actual prints to be filled in as the sands are trampled round them by the eager throng. Halsted preached the general lesson of gentleness and hæmostasis, the gospel of tissue-reverence that on the Continent was being taught by Kocher and in Britain by Mayo Robson and Moynihan. But he appears to have been a shy, reserved and unapproachable martinet, who taught by example rather than precept, and his only contact with surgery outside America was with the German school. He never tried to meet the men in this country who were following the same path, and following it, if any opinion can be based on the work of their pupils and successors to-day, with much greater success than the South German school. The result of this narrow outlook and aloof personality is that the majority of Halstedians to-day are his shadows. They are carrying out the technique of 1910 with all the reverence and attention to detail of a religious exercise, and seem to have lost sight of the object with which these details were once introduced. I never saw Halsted, but technique that is so identical in several cities must be his own. I was privileged to watch Moynihan several times, and, without haste, he would finish any operation in about half the time, yet do it more gently, cleanly and bloodlessly.

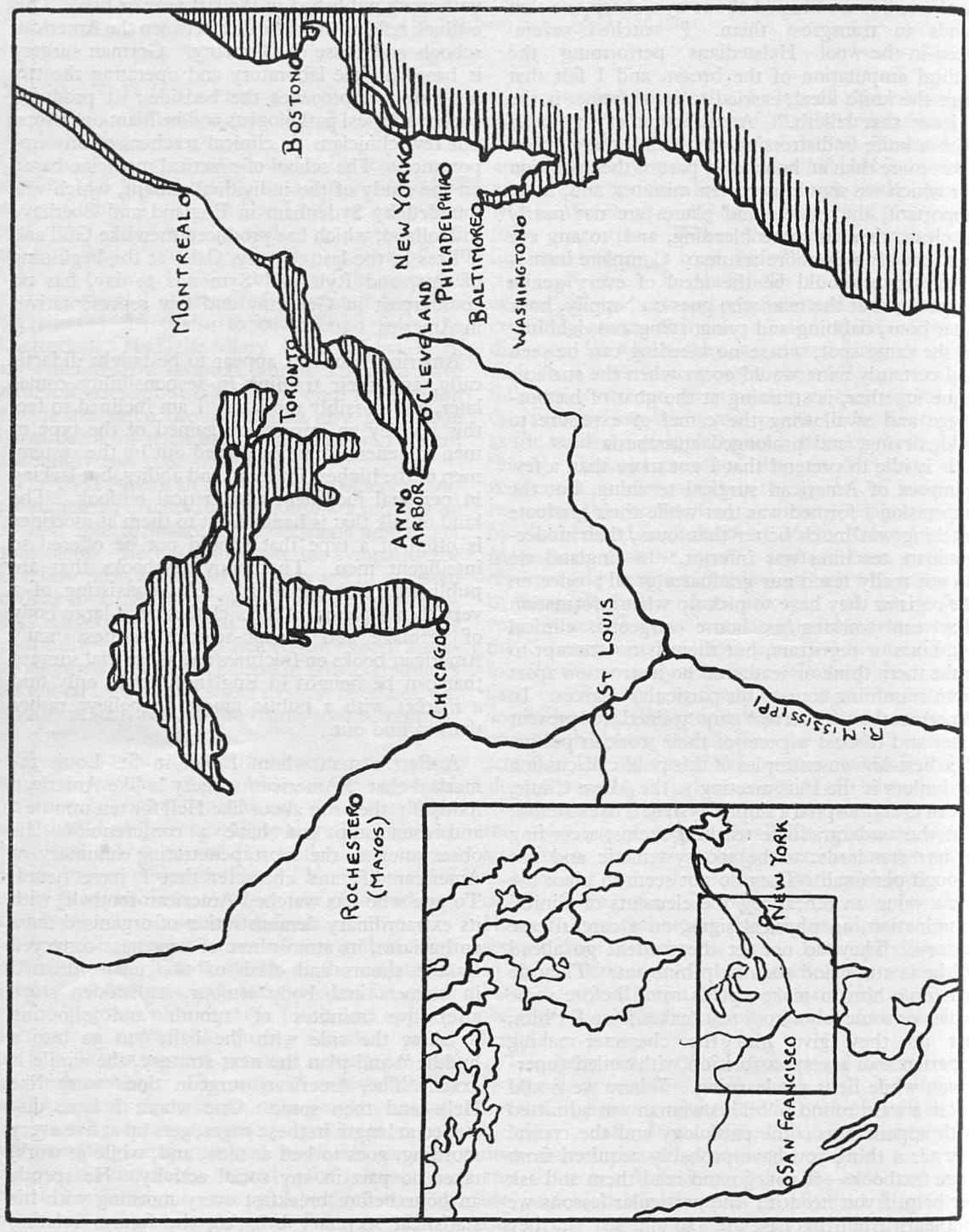
The basic tenets of this school are knife dissection and complete hæmostasis with the very finest silk ligatures that include nothing but the bleeding point. It is claimed that clean cutting does the minimum of damage. Where tissues must be cut, a knife is probably the best tool to use, and blunt dissection is usually bad surgery. But in any major operation only part of the dissection is across structures that must be divided, while part is round structures or between struc-

tures, along areolar planes that can be pushed gently aside with a blunt instrument that keeps to them, but are messed about by a sharp one that tends to transgress them. I watched several dyed-in-the-wool Halstedians performing the radical amputation of the breast, and I felt that here the knife ideal, carried to its extreme, is the "letter that killeth." A dissection of the axilla with a knife is distressing to watch; the surgeon takes more than an hour to do part of the operation for which we should need ten minutes, and, more important, the vessels and planes are not nearly as clean, there is more bleeding, and, to any eye but that of faith, more trauma. Complete hæmostasis again should be the ideal of every gentle surgeon; but the man who goes on happily, hour after hour, dabbing and tying, tying and dabbing, in the same spot, where no bleeding can be seen and certainly none would occur when the surfaces came together, is straining at the gnat of hæmorrhage and swallowing the camel of exposure to cold, drying, and prolonged anæsthesia.

It is idle to pretend that I got more than a few glimpses of American surgical teaching, but the impression I formed was that while their graduate teaching was much better than ours, their undergraduate teaching was inferior. In England we do not really teach our graduates at all; once on the register they have to pick up what information they can working as house surgeons, clinical assistants or registrars, but there is no attempt to make them think or read, and no instruction apart from cramming courses for particular degrees. In America the "interns" are trained to present cases and discuss aspects of their work in public. The best-known examples of this public discussion by juniors is the staff meeting at the Mayo Clinic, and at every hospital a similar system is in existence. But the undergraduate teaching seems, according to our standards, to be too systematic and not enough personal. They do not seem to place the same value on rehearsing the elements of clinical examination, on physical signs, on a careful case history. They do not let the student go ahead till he is stuck and then help him out. They do not force him to make up his mind before some senior or some laboratory test makes it up for him, nor do they give him the character-making experience of a responsible job with veiled supervision while he is yet learning. Where we would say in a ward round: "This woman was admitted with appendicitis; the pathology and the typical story is a thing you have probably acquired from your textbooks—if not, go and read them and ask for help if you need it; the particular lessons we can learn from this case are 'so and so'"; they would say, "This woman has appendicitis," and use her as the text for a talk on appendicitis, stressing particularly pathology, laboratory methods of diagnosis, and operative surgery, and dealing with work published in the last year or two. This outlook reflects the close link between the American schools and those of Germany. German surgery is based on the laboratory and operating theatre, but rarely approaches the bedside; it produces superb surgical pathologists and brilliant operators, but few clinicians or clinical teachers of any importance. The school of practical medicine based on the study of the individual patient, which was founded by Sydenham in England and Boerhave in Holland, which has produced men like Gull and Wilkes in the last century, Osler at the beginning of this, and Ryle and Symonds to-day, has no counterpart in Germany and few representatives in America.

American students appear to be taught didactically, and their training in responsibility comes later, and possibly too late. I am inclined to feel this way by an impression gained of the type of men in general practice turned out by the system, men of the highest integrity and ability, but lacking in personal judgment and critical outlook. The kind of talk that is handed out to them at meetings is often of a type that should not be offered to intelligent men. The many textbooks that are published, and apparently sold, consisting of a very thin skeleton of facts clothed in a large body of verbiage and pseudo-science (witness many American books on fractures and industrial surgery that can be bought in England), could only find a market with a public taught to believe rather than to find out.

A Bart.'s man whom I met in St. Louis remarked that "American surgery is like American football; they run about like Hell for ten minutes, and then stop and have a conference." His observation is the most penetrating summary of American life and character that I have heard. To one who has watched American football, with its extraordinary demonstration of organised mass enthusiasm, its atmosphere of fierceness conveyed by the shouts and clash of two teams dressed in helmets and body armour, its sudden stops after five minutes of tumult and shouting to allow the side with the ball "to go into a huddle" and plan the next strategy, the simile is exact. The American surgeon does work like Hell—and then some. One whom I have discussed at length in these pages, gets up at five every morning, goes to bed at nine, and, while at work, takes no part in any social activity. He spends an hour before breakfast every morning with his statistical secretary bringing the figures relating to some branch of his activities up to date, and in the evening when he is finished with patients,



Cities visited in the American Journey

he goes straight to work at some lecture or article. All of them start operating at 7 or 8 in the morning and get through tremendous lists. The day, punctuated by simple meals snatched at the hospital cafeteria, is spent in lectures, staff discussions, or more informal meetings. Private patients take up time, but as these are all in a wing of the same hospital, none is wasted in transit. Yet any visitor is welcomed by these busy men, not only welcomed, but overwhelmed with kindness and information. And everything — operating, teaching, lecturing, entertaining—is done at top speed and with the most whole-hearted concentration. No British surgeon attempts to work so long or at such a pace; no living surgeon could keep it up and go on living. But they do not keep it up for more than a fortnight at a time.

The other side of the picture is the conference or convention. British surgeons have only two opportunities of meeting in the year, the Association of Surgeons in May and the British Medical Association in July, and each of these takes the mornings of three days. In America there is some large gathering going on every week of the year, and the big men in surgery seem to attend about half of them. At meetings three or four thousand miles apart and separated by only a week or two, the same men will be speaking. But such journeys and such discussions are a rest to the busy man after the routine work. A trip across the continent means three days of comfortable Pullman travelling, with a really good bed at night, a " club car " for relaxation in the day, and *à la carte* meals delightfully served. The lecture he is going to give has been put into his bag in the rough form of figures and lantern slides by his super-efficient secretary, and will not weigh on his mind. After three days of complete relaxation he arrives at the meeting and stays at a hotel of the utmost luxury, where he meets many of his old friends. He must take the stage, and he must see that he meets many people with whom he has matters to discuss, but he is not on duty and not leading his team, and he is thoroughly happy. The same man who, in his home town, rises at 5 and lies down at 9, becomes for a brief week a playboy, a cheerful companion, a retailer of delightfully humorous stories with a faintly blasphemous tinge. The meetings over, he and his fellows return, giants refreshed, to the grim task of American surgery.

These periods of relaxation are made possible by the lavish organisation of the American hospitals, which have the strong points of the voluntary and State hospitals, the independent outlook, efficient organisation and picked staff of the first, the material benefits of the second. The majority owe their origin and equipment to voluntary supporters, but the expenses of maintenance are proportionately small; they are not taxed or rated, they receive adequate State grants for the poor they treat, and they have a very high proportion of pay-beds. They thus have much more to spare for equipment and executive staff, and further, since it is known that subscriptions are not for mere maintenance or reduction of debt—unattractive objects of charity—they find it easy to get gifts of money, apparatus, or buildings for special purposes. The unit which an American surgeon leads is, therefore, a large and highly efficient one. He has every material assistance he needs, his records are faultlessly kept, and any conceivable information he may require about his patients is instantly available; he has the services of artists and photographers to keep pictorial records of his cases and operations and to prepare slides for his lectures and illustrations for his articles, and he has a number of senior assistants, anxious to work at any problem he suggests, able to tackle the most intricate operation in his absence or give any of his lectures at an hour's notice, yet not in a position to raid his private practice. So as he sits in his Pullman chair and lights his cigar, he can look forward to eight or ten days of carefree existence unmarred by any anxiety as to what may be happening while he is away, or how his practice will fare when he returns.

It is a platitude to remark that America is a young country and that the Americans keep many of the qualities of the child. They are restless, full of abundant energy, basically simple in outlook and taste, slow to think or speak unkindly of anybody, always asking questions, always anxious for approval, delighting in anything new because it is new, amused by humour of the practical schoolboy type. It follows from this charming and youthful exuberance that they take people as well as things very much on trust, are prone to accept the man who is good at " selling himself " at his own face value and to underestimate a much greater man who works in silence and reports his discoveries only when he has checked them in every detail. This shows itself, not only in the fact that several of their own countrymen seem to enjoy reputations and to have secured appointments beyond their real desert, but in the exaltation of some of our surgical visitors, who are very small beer over here, to a position that pays tribute to their assurance rather than their merits. But it follows also that the stranger, however unworthy, will always meet a warm welcome, the discouraged and disillusioned will draw fresh supplies of energy and hope, and the inquiring surgeon will find, if not the answers to all his problems, at any rate an indication of the way the answer is to be sought in the example of these men who are treading so gaily and fearlessly into the future.

Reviews

Heart Disease and Pregnancy. By CRIGHTON BRAMWELL, M.A. (Camb.), M.D. (Manch.), F.R.C.P. (London), and EDITH A. LONGSON, M.B., Ch.B., D.P.H. (Manch.). Published by the Oxford University Press. Pp. 194. *Price* 8*s.* 6*d.*

THIS monograph contains the clinical reports of 350 patients in whom pregnancy was associated with organic heart disease, together with details of their condition before, and for variable periods after, their confinement.

The first part of the book deals with the elucidation and significance of physical signs, the understanding of which is made more easy by the inclusion of admirable illustrations, and in the later chapters are set down clearly and concisely the conclusions arrived at as a result of the investigations.

The authors found no history of rheumatic fever in nearly half the cases suffering from mitral disease, and that the occurrence of repeated attacks of rheumatic fever does not appear to add to the gravity of the prognosis. On the other hand, if a few years after the first attack of rheumatic fever there is evidence of severe cardiac damage and particularly if this is progressive, the risks are much increased.

Before pregnancy or during the early months tachycardia, œdema of the feet and rales at the bases of the lungs, or evidence of diminished response of the heart to effort as indicated by breathlessness and palpitations, are to be considered signs of incipient cardiac failure and their presence warrants constant ante-natal supervision.

In the later months even in healthy women similar signs are commonly found, and, in addition, there may be an increase in the transverse diameter of the heart as shown by X-ray: these findings are of little significance, being the result of increasing weight, the demand for maintaining a placental circulation, and alteration in the shape of the chest.

The diagnosis of heart disease is, in itself, no cause for advising against pregnancy nor for alarm during the ante-natal period. Heart failure is the danger signal, and in the majority of cases is caused by the onset of auricular fibrillation. It is shown that the risk of this complication increases with advancing age, and the mortality in the cases with this arrhythmia was found to be four times that of the whole series.

Stress is laid on the economic conditions of the patient, which might prejudice unfavourably the amount of rest she is able to obtain.

Of fundamental importance is the fact that in cases of pregnancy of more than three months' duration which are complicated by cardiac failure, it is usually safer to allow the pregnancy to proceed until the child is viable, and then to deliver by Cæsarean section than to carry out immediate abortion. If for cardiac reasons termination of pregnancy is necessary, treatment of the heart failure should receive first consideration, and only when there is a response to this treatment should operative procedures be undertaken.

Valuable information may be obtained on the many problems which beset the management of these difficult cases, and this book can be recommended as a reliable guide to both cardiologists and obstetricians. The only possible criticism is that so much space devoted to the general feature of heart disease makes it tedious to the expert looking for the special observations and recommendations about the effects of heart disease on pregnancy and of pregnancy on heart disease; but to the student this may be an advantage.

The Infant; A Handbook of Management. By W. T. PEARSON and A. G. WATKINS. Published by Messrs. H. K. Lewis & Co., Ltd. Pp. 56. *Price* 2*s.* 6*d.*

THIS is an excellent little book on the feeding and management of infants, and should be most valuable—as its authors hoped it would—"to Infant Welfare workers, house physicians, medical students, nurses and pupil midwives, and, last but not least, to the general practitioner, to whom such problems are an everyday occurrence." It is comprehensive and yet concise, and sets forth clearly all the practical points which are so important in the handling of the child.

First and foremost great stress is laid on the importance of breast feeding, which is so often overlooked, even by those who should know better. Artificial feeding is dealt with clearly and practically, and so, too, is the general care of the child.

At the end of the book are many useful recipes, and even more useful tables showing normal height, weight, urinary output, food requirements, etc., at progressive ages. For until we know the normal, how can we recognise and treat the abnormal?

May this little book have the success it deserves.

E. A. O.

Practical Child Psychotherapy. By C. BOENHEIM. Published by Messrs. John Bale, Ltd. Pp. 199. *Price* 10*s*. 6*d*.

THIS book falls between two stools—it is neither practical enough for the general medical man or student, nor sufficiently detailed to be a serious contribution to child psychiatry. The author says: "My aim is to outline problems rather than give a presentation of each separate problem," but this objective, carried out in long paragraphs of vague truisms, gives one the general impression of confusion. The first fifty pages of inconclusive comparison of psychological theory would be well omitted.

No mention is made of the common complaints of truancy or delinquency, nor does he deal adequately with the childish features which underlie many of the symptoms. He somewhat unjustifiably extends the term "anorexia nervosa" to cover any loss of appetite in nervous children, and even more unjustifiably advocates repeated waking through the night for enuresis. The one section to which no exception is taken is that on stammering, and this is simple and concise. The general approach to the subject is sound in that it is "multidimensional," and the rare histories interesting if not unusual, but the chief objection to the book is, despite the title, its lack of practicality.

F. W. B.

Population and Fertility. By D. V. GLASS and C. P. BLACKER. Published by the Population Investigation Committee, 69, Eccleston Square, S.W.1. *Price* 3*s*.

THAT the English birth-rate is falling is common knowledge; the effect of this fall on the population is far from simple. This stimulating and carefully written booklet has been issued to clarify the position.

The authors point out that the tendency of a population to increase or decrease can only be gauged from the extent to which the women of the population replace themselves. This replacement can be calculated in the form of an index known as the net reproduction rate. If this index is above unity the population tends to increase; if below, to decrease.

Rates for the chief civilised countries are tabulated in diagrams. From these it can be seen that, with the exception of Canada and South Africa, only the Totalitarian Countries show a rate above unity. The rate of England and Wales is the lowest of all.

These conclusions are further illustrated by a copious series of "Population Pyramids" showing in picture form the age and sex distributions in 1911 and 1935.

A falling birth-rate implies a decrease in the young, who now in England are outnumbered by those in the prime of life. In other words the English matron, now nearly middle-aged, is showing signs of approaching senile decay. Eventually we must be swamped by more virile matrons of greater reproductive power.

Little is known of the causes of this decline in fertility; the Registrar-General's returns are singularly unhelpful, though more is to be expected from censuses in the future now that the Population (Statistics) Bill has been passed. Further information will have to be obtained through voluntary questionnaires.

Measures designed to increase our fertility are discussed in the last chapter; how far they would be successful in the present state of Europe is doubtful, though some increase in births has followed their employment in Germany. Whether such measures are taken or not depends upon one's outlook. To the professional politician, whose range of vision is no further than from a Berchtesgarten to a Munich, planning for five years ahead is fantastically unimportant; to the eugenist the next century is as important as the present day.

W. W. G.

The Nose, Ear and Throat for Nurses and Dressers. By MICHAEL VLASTO, M.B., B.S., F.R.C.S. Published by Messrs. Faber & Faber, Ltd. Pp. 228. *Price* 7*s*. 6*d*.

THIS little book provides an introduction to ear, nose and throat work for the nurse who has just entered the department. The illustrations of instruments are particularly good. The anatomy and physiology is adequate, and the clinical descriptions and outline of operations will appeal to the nurse who is taking an intelligent interest in her work. The detailed descriptions of theatre technique are likely to be of use only to the nurses of the hospitals to which the author is attached, for most hospitals have their own traditional and well-inculcated procedure to be learned by experience. The instructions on treatment are on the whole orthodox and safe, but the introduction of pledgets of cotton wool into the nose in the treatment of epistaxis is unusual and dangerous. One must question, too, the statement that "the only satisfactory treatment for hypertrophied and septic adenoids is their removal by operation"—an entirely misconceived idea. Many of the admonishments to nurses are excellent, and they may be advised to borrow this book from the Library. For students or dressers this volume is inadequate.

H. J.

Sport

Rugby

THE season of 1938-39 being completed, I have pleasure as in past years in enclosing chart and statistics of the 1st XV. Generally a better season than the previous, but, even so, we had the highest number of points scored against us than any other first-class club.

Thirty-one games were played, five less than last season. Of the 31 games, two were Hospital Cup matches; three games of the fixture list as arranged had to be scratched due to unfit grounds.

The 1st XV were rather unlucky during the season with a number of injuries.

With regard to the points, these can hardly be compared with the previous seasons, since, as stated, five games less were played. However, in less games played 42 points more were scored, while against there is a drop of 109 points.

Due to various reasons during the season slight alterations were made in the fixture list. Old Blues were played instead of United Services on October 1st and University College School Old Boys were played instead of Coventry on February 4th.

We failed to score on three occasions, while out opponents failed on one occasion.

Our highest score was 25 points against Old Whitgiftians, and the highest score against us was 28 points scored by London Scottish.

Probably our most notable victory was against Birkenhead Park on their own ground, we beating them by six points to nil. This is more pleasing in view of last season's result, when we were beaten by 51 points.

We were unable to regain the Hospital Cup, still held by St. Mary's Hospital, being beaten by St. Thomas's Hospital in one of the semi-finals, after a very close game resulting in the score of 5-6 points.

Forty-two players have taken part (the same number as last season) in 1st XV games, as follows :—Fletcher (29); Vidot, Bulstrode, Fuller (28); Babrow (26); Steytler (24); Kynaston (23); Osmond (21); Plowman (20); Wiggins, Kolesar, Hanson (19); Camp (17); Renton (16); Crawford, Halamandres (12); Hartley, Dick, Lewis (11); Forbes, Breen-Turner, Darke (9); Finnigan, Eustace, Sharpe (8); Rochford (7); Williams (6); Morris (4); Gartrell, Christellis (3); Boyd, Lane-Roberts, Phillips, Sanders, Baxter (2); and Hinde, McCall, Drew, Luyt, Birks, Sullick, Charlton (1).

The following have scored tries :—Camp (11); Hanson, Babrow (6); Hartley, Renton (4); Dick, Kynaston (3); Crawford (2); and Steytler, Rochford, Wiggins, Kolesar, Fletcher, Sharpe, Bulstrode, Phillips, Breen-Turner, Luyt (1).

The following have scored goals :—

	Tries Converted	*Penalty Goals*	*Dropped Goals*
Plowman	12	10	—
Kynaston	6	4	—
Babrow	—	—	1
Steytler	—	—	2
Kolesar	—	—	1
Sanders	1	3	—

making a total of 49 tries, 19 tries converted, 4 dropped goals and 17 penalty goals, being 252 points.

Our opponents' score was as follows : 85 tries, 36 tries converted, 20 penalty goals, 10 dropped goals, being 427 points.

Therefore the completed figures are : Played, 31; won, 9; drawn, 2; lost, 20, points for, 252; points against, 427. Average points per game : For, 8.1; against, 13.8; percentage, 32.25.

The following table gives the records from 1920-21 :—

Season.	*P.*	*W.*	*D.*	*L.*	*Points. F.*	*A.*	*Per cent.*
1920-21	27	19	2	6	600	96	74.07
1921-22	35	26	2	7	467	162	77.0
1922-23	32	19	4	9	343	203	65.62
1923-24	27	13	3	11	285	151	53.4
1924-25	31	16	3	12	291	230	56.45
1925-26	29	14	3	12	235	234	53.5
1926-27	34	18	3	13	371	294	57.35
1927-28	26	12	3	11	190	206	52.0
1928-29	30	11	1	18	220	404	38.3
1929-30	28	12	1	15	322	311	44.7
1930-31	28	13	2	13	306	289	50.0
1931-32	28	14	0	14	295	324	50.0
1932-33	30	14	1	15	347	347	48.3
1933-34	32	14	2	16	355	373	46.87
1934-35	30	10	1	19	287	518	35.0
1935-36	33	10	1	22	286	484	31.8
1936-37	34	7	1	26	215	608	22.0
1937-38	36	11	1	24	210	536	32.0
1938-39	31	9	2	20	252	427	32.2

ROY C. HOLLOWAY,
Hon. Life Member, G.H.C.U.

Blues and Half-Blues

At the last meeting of the Blues Committee the following Blues and Half-Blues were awarded :—

Rugby Football Club.—Full Blues : J. M. Hanson, D. Fuller, H. F. Osmond, R. U. F. Kynaston, C. C. Vidot, J. Bulstrode, P. Kolesar. Half-Blues : J. Breen-Turner, R. Camp, A. J. Drew,

GUY'S HOSPITAL R.F.C.

SEASON 1938-9

95th Season

Average Points per Game (For): 8·1

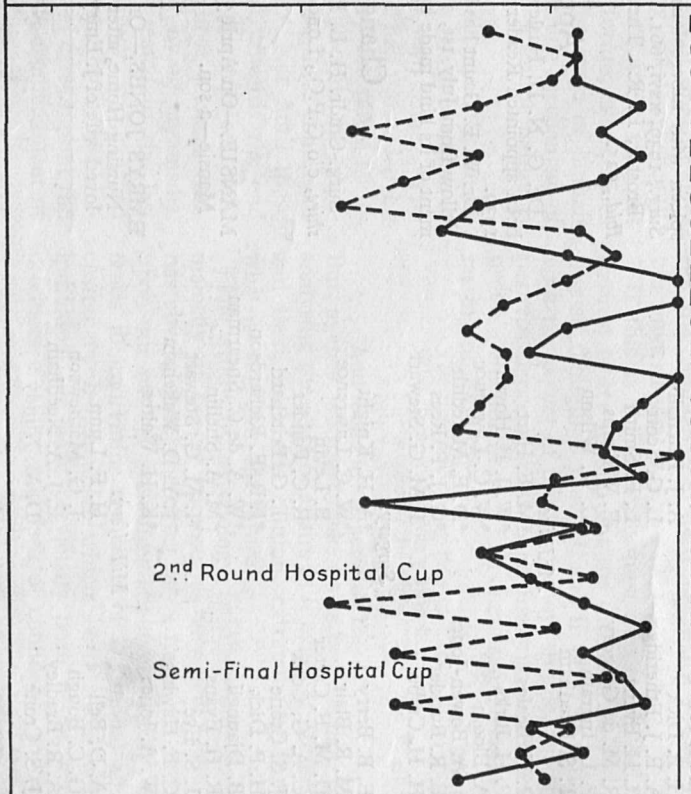
Average Points per Game (Against): 13·8

PLAYED	WON	DRAWN	LOST
31	9	2	20

Percentage: 32·25%

Total Points (For): 252

Total Points (Against): 427



OPPONENTS	DATE	Gd	SCORE For F	SCORE For A	Gl.	T	Against Gl.	Against T	GOALS	TRIES
Neath	1938 Sept. 17	A	8	15	2+	–	2◎	2	Plowman 2.+	Steytler.
Old Paulines	" 24	H	8	8	1	1	2+	–	Plowman.	Hanson 2.
Old Blues	Oct. 1	H	10	8	2	–	2+	–	Plowman 2.	Camp, Sharpe.
Aberavon	" 8	A	3	16	–	1	3+	1		Bulstrode.
Coventry	" 15	H	6	26	1+	1	6◎◎◎	1	Plowman.+	Hanson.
Harlequins	" 22	H	3	16	1+	–	2	2	Plowman.+	
Plymouth Albion	" 29	A	6	22	1+	1	4◎◎	2	Plowman.+	Dick.
Cambridge University	Nov. 2	H	16	27	3+	1	6◎◎	1	Plowman 3.+	Dick, Hanson, Fletcher.
Old Blues	" 5	H	19	8	4◎◎	1	1	1	Plowman 4.++	Phillips, Dick, Hanson.
London University	" 9	A	9	5	1+	2	1	–	Plowman+.	Breen-Turner, Crawford.
Birkenhead Park	" 12	H	0	9	–	–	–	3		
Rosslyn Park	" 19	A	0	14	–	–	1	3		
Gloucester	" 26	H	9	17	1+	2	3◎◎	2	Kynaston.+	Hanson 2.
Richmond	Dec. 3	H	12	14	2◎	1	1	3	Kynaston, Kolesar.Φ	Babrow, Crawford.
The Army	" 10	H	0	14	–	–	1	3		
Catford Bridge	" 17	H	3	16	–	1	2	2		Hanson.
Old Millhillians	" 31	A	5	18	1	–	4◎◎◎	–	Kynaston.	Luyt.
Birkenhead Park	1939 Jan. 14	A	6	0	1+	1	–	–	Kynaston.+	Babrow.
Old Leysians	" 21	A	3	10	–	1	3◎◎	–		Hartley
Old Whitgiftians	" 28	H	25	11	4◎	2	2+	1	Kynaston 3, Van Steytler.Φ	Camp, Wiggins, Kolesar, Renton, Kynaston.
U.S.C. Old Boys	Feb. 4	A	8	7	2+	–	1◎	1	Plowman 2.+	Camp.
Royal Air Force	" 8	H	16	16	2◎◎	3	3+	1	Plowman+, Steytler.Φ	Camp, Babrow, Renton.
U.C. Hospital	" 14	N	12	7	–	4	2◎◎	–		Hartley 2, Camp 2.
London Scottish	" 18	A	8	28	1	1	4◎	3	Plowman.	Camp, Babrow.
Devonport Services	" 25	H	3	10	–	1	1◎	2		Rochford.
Aberavon	Mar. 4	H	8	23	1	1	3◎	3	Plowman.	Kynaston, Camp.
St. Thomas Hospital	" 7	N	5	6	1	–	–	2	Plowman.	Camp.
Bedford	" 11	A	3	23	1+	–	1	6	Kynaston.+	
Old Alleynians	" 18	H	12	9	2◎◎	2	2◎◎	1	Sanders.++	Kynaston, Camp.
Gloucester	" 25	A	8	13	2+	–	2	1	Sanders 2.+	Babrow.
Old Cranleighans	April 1	H	18	11	3◎	2	1	2	Babrow Φ, Kynaston 2.+	Hartley, Babrow, Camp.

Φ = Dropped Goal + = Penalty Goal

T. Eustace, D. P. Finnegan, P. Gartrell, T. Renton, J. P. Rochford, R. N. Sharpe, A. E. Wiggins.

Association Football Club.—Full Blues: N. L. McNeil, D. E. Williams.

Boxing Club.—Full Blues: D. Fuller, P. E. Jones, T. R. Wooldridge. Half-Blues: G. R. W. N. Luntz, J. P. Rochford.

Hockey Club.—Full Blues: S. G. McCallin, E. J. Needhan, D. G. Roberts. Half-Blues: D. S. Foster-Smith, J. R. Fleming, R. Glover, G. E. Goodheart, R. D. C. Hart, K. W. Palmer, T. C. Parry.

Golf Club.—Full Blues: S. Drury, S. A. Marsh. Half-Blues: K. S. Maclean, S. C. McCallin.

D. W. BURNFORD,
Hon. Secretary, Blues Committee.

Hospital Information, etc.

Notice

THE LATE Dr. G. H. ORIEL

Dr. G. H. Oriel, whose death on May 2nd was reported in the last issue of the *Gazette*, was for some time Demonstrator of Clinical Chemistry at Guy's, and wrote several papers, mainly on the allergic diseases, during his time here. He came to Guy's from Sidney Sussex College in 1917 and obtained his M.B., B.Ch. (Cantab.) in 1920, proceeding to the M.D. in 1925. His early death at the age of 44 has deprived the medical profession of an able member.

Pass List

CONJOINT EXAMINATION.

April, 1939.

Pathology.

R. H. Bhanji
C. J. St. Cin
R. B. Clayton
*H. H. Crabb
H. P. Dick
A. E. J. Etheridge
*R. H. Evans
R. M. de Gregory
F. L. Ingram
T. S. Leedham
D. C. Lewin
H. F. Lunn
D. A. Osborn
E. L. Moll
A. J. Patenall
L. G. Scott
L. E. Smith
E. Williams
C. W. Wilson

Medicine.

P. H. Beales
*P. H. Birks
A. Bloom
*J. A. Bowen-Jones
F. R. Buckler
*H. H. Crabb
*M. F. Hart
*W. J. F. Howard
*W. C. Lawrence
*D. E. Meredith
*G. J. F. Rees
I. M. G. Stewart

Surgery.

*E. B. Berry
*M. R. Blair
D. M. F. Carter
*C. A. G. Cook
J. S. Crone
H. P. Dick
*B. Djanogli
*R. H. Evans
I. S. Eve
*C. F. Hawkins
*W. A. Jones
*A. H. Knight
*W. C. Lawrence
B. Levin
R. C. Ponder
T. G. Pritchard
*J. R. E. Richardson
*W. A. de C. Shearman
*M. A. Shellin
*I. M. G. Stewart
J. Y. D. Wakeham
*K. H. Walter

Midwifery.

A. D. Bell
G. C. Bough
A. R. Bradley
J. S. Crone
H. F. Lunn
J. G. Mathewson
E. J. A. Needham
D. M. Nundy
I. S. Eve
F. N. Glover
P. Greenstreet
B. M. Heap
D. C. Lewin
D. A. Osborn
C. H. Phillips
F. W. B. Rilstone
F. R. Turner
J. M. W. Wells

* Have completed the examination.

UNIVERSITY OF CAMBRIDGE.

May, 1939.

The following degrees were conferred:

M.D.
C. G. Pantin.

M.Ch.
W. G. Gill.

Papers by Guy's Men

Atkins, H. J. B. The nature of chronic mastitis. *Brit. Med. J.*, 1939, i, 866.

Lambrinudi, C. Injuries to both semilunar cartilages of the knee-joint. *Proc. Roy. Soc. Med.*, 1939, xxxii, 635.

Forman, Louis. Grouped miliary sarcoid of Boeck. *Ibid.*, 559.

Gill, W. G., and Mann, W. N. Tuberculosis of the spleen with tuberculous subphrenic abscess. *Brit. J. Surg.*, 1939, xxvi, 661.

Broster, L. R. The surgery of the adrenal cortex. *Ibid.*, 925.

Appointments

Dr. G. N. D. Haslewood, B.Sc., M.Sc., Ph.D., has been appointed Reader in Biochemistry from May 1st, 1939.

Dr. W. E. Gaunt has been appointed Dental Research Fellow from July 1st, 1939. This is the first appointment of its kind made by the Dental School.

Change of Address

Surg.-Cmdr. H. L. Peregrine, R.N., H.M.S. *Devonshire*, c/o G.P.O., London.

Birth

MANSIE.—On April 5th, 1939, to Enid, wife of James Mansie—a son.

Death

EMRYS JONES.—On May 3rd, 1939, in a London Nursing Home, after a prolonged illness, Jean, dearly loved wife of J. Emrys Jones, Gowerdale, Llandudno.

EDS. {W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

IT is the opinion of most people to-day that we are living in a scientific world, and there is no doubt that the creation of science is the peculiar contribution of Western Civilisation to the development of human life. Other civilisations in other periods have made different contributions to the history of man, perhaps in some cases more important contributions. But science is our gift to the world. Our effort in producing science need never be repeated, but remains for all time, available to the whole of humanity in future ages. But there are large grounds for thinking that the process of the production of science is nearing completion, and with it the completion of the main function of what we have grown accustomed to calling modern society. This is not to say that science itself will not continue to develop in the future, along lines already laid down, but that the stage of human history during which the governing mechanism of human thought has been of a scientific nature is coming to an end.

The reason for thinking that the task of creating science is nearing completion is the appearance of scientific psychology in our own time. The process of establishing science has proceeded by stages which are determined by the range of its subject matter. In the first stage came the establishment of the physical sciences—those concerned with the behaviour of matter. Not until these had been effectively organised, towards the end of the eighteenth century, was the stage set, so to speak, for the emergence of those sciences concerned with the behaviour of living organisms. These sciences began to be created in the last quarter of the eighteenth century, and reached completion in the nineteenth century by the discovery of satisfactory methods of carrying out the science of biology. In turn the establishment of this second stage led to a further extension of inquiry into the field of human behaviour, and thus the science of psychology emerged at the end of the nineteenth century.

That this third stage completes the creation of science is clear from the fact that no further extension of the field of investigation is possible. All the phenomena of experience are covered by these three sets of sciences, those of the nature of matter, of life, and of humanity. Thus the peculiar contribution of our civilisation to the world has been made. The task of producing science is complete, though not, of course, the task of science itself. It is the creation of science, not the completion of its work, that is the act of our modern society.

If this is the case, it must necessarily be of interest to try to find out the direction in which human thought is moving, and if we were gifted with the power of prophecy, how simple, though perhaps depressing, such an investigation would prove. One might even find oneself in the embarrassing position of—

> The neurotic young lady of Crewe,
> Who dreamt she was eating her shoe.
> She awoke in the night
> In a terrible fright,
> And found it was perfectly true !

But, as it is, we must make do as best we can, by analysing the state of affairs as it exists at present, and then, with due caution, extrapolating from what we find into the future.

The study of psychology is distasteful to a majority of people because, as any new science has always done, the effort has a profound effect upon our natural prejudices about ourselves. It tends to undermine the basis of traditional and customary belief upon which both social and individual life have previously been based, and produces a widespread lack of confidence in the

articles of faith by which previous generations have lived without giving any satisfactory alternative. And since it is a new science, it is proportionately vulnerable, so that it is easy to find a just point of criticism, and thereby persuade oneself that the whole is negligible. But it is only by investigating the nature of the psychological sciences, and the relation that they hold with other branches of human learning, that we can determine their limitations, and thence the limitations of all scientific methods. This is not to say that everybody must follow the practice of psychology—that is obviously a matter for the full-time expert; but to have an opinion of its nature and tendencies, and not least its limitations; in fine, to have a philosophy of psychology is a matter of importance for everyone, and most of all, of course, for the doctor.

LORD NUFFIELD, with his characteristic generosity, has given the millionth Morris car to Guy's. This is to be the prize in a competition. The cost of a single entry in this competition is one shilling, and the shillings so collected will go to swell the funds of the Appeal Committee. The car is a 1939 Morris 14. It may be seen in the showrooms of Stewart & Arden, Ltd., Berkeley Square, W.1. Captain Eric Waley, Chairman of the Appeal Committee, has kindly given the first year of the car's tax. Books of twenty one-shilling tickets will be supplied on application to the Appeal Secretary, Guy's Hospital, S.E.1. Please sell as many of these tickets among your friends as you possibly can.

But we warn you we have decided to win this car for ourselves. We very much want a car. It would be very pleasant to speed out in it to country lanes in the summer evenings. And the competition is not really overpoweringly difficult. All one has to do is to state the order of importance of the fourteen points of the Morris 14 mentioned on the competition form. The correct order " has been determined by a Committee of well-known Motoring Correspondents and is in a sealed envelope in the Strong Room of the Hospital." Not knowing any " well-known Motoring Correspondents," we first thought of burgling the Strong Room. But, so far, infirmity of purpose has led us merely to argue hotly with any and all we meet on such important points as whether a " cushioned cork inset clutch " is more important than " a five-point rubber engine mounting." We have not settled this question yet. Again, we were quite certain that the most important point of all was the " improved Lockhead hydraulic brakes." After all, where would one be in a car without good brakes—in the ditch or the mortuary. But then someone advanced the theory that without " the O.H.V. Engine for brilliant road performance " one would not need any brakes. On the whole it seems that we shall have to rid ourselves of our infirmity of purpose and burgle that Strong Room. When we win the car we will give a ride to the first twenty of the competition's losers who apply. And thank you very much, Lord Nuffield, for that car we are going to win.

THE third, and last, concert of the season to be given by the Guy's Hospital Musical Society will take place on Wednesday, June 8th, and Thursday, June 9th, 1939, commencing at 8.30 p.m. on each evening, in the Physiology Theatre, Medical School. The programme that has been chosen is a specially light one and of wide appeal. Messrs. A. W. P. Stone and F. N. Stares will accompany on two pianos. All seats are priced at one shilling, and tickets may be obtained in advance from the secretaries or from any member of the Society.

IT will be of interest to readers of the *Gazette* to learn that Mr. C. H. Golding-Bird, late Consulting Surgeon to the Hospital, who died on March 6th, has left his house at Meopham, in Kent, to Guy's. In his will he suggested that it might be used as a convalescent home for Sisters and nurses.

Obituary

CHARLES HERBERT FAGGE, M.S., F.R.C.S., Hon. F.R.A.C.S., Hon. M.D. Melbourne.

MR. C. H. FAGGE, Consulting Surgeon to the Hospital, died in Nuffield House on Friday, May 19th. His death breaks a link which binds the Hospital to two of its most illustrious names—John Hilton, the surgeon, whose " Rest and Pain " remains a surgical classic, and Charles Hilton Fagge, one of the most successful physicians of the later nineteenth century. His father, a general practitioner at Lutterworth, had been a student here.

Fagge was born at Lutterworth in 1873 and educated at Oundle School, proceeding thence to

Guy's. Here he obtained the Gold Medal and Exhibition in Anatomy in the University of London, and graduated in 1897 with a Gold Medal and Exhibition in both medicine and surgery. Only a year later he obtained the F.R.C.S. and the M.S. London.

After qualifying, he held, apart from the usual house appointments, various posts in the Anatomy Department, from which originated a love for anatomy that never left him, and he was also for some time editor of the *Gazette*, a post that he held with ability, as can be testified by anyone who has access to the files of the paper.

When Fagge was appointed Assistant Surgeon to the Hospital he was also given, as was then the custom, a special department, which in his case was the Aural. For this he prepared himself by post-graduate studies at Berlin and Vienna, and by working as clinical assistant at the Royal Ear Hospital, Soho Square. He conducted the department with great efficiency, and might have made his name as an aural surgeon, but when he became full surgeon in 1909, and the Ear, Nose and Throat Department was set up in charge of a specialist surgeon of its own, he gave up his connection with otology and settled down to what were his favourite subjects—the surgery of the skeleton and of the abdomen.

His particular interest in these somewhat opposed subjects can be accounted for by the fact that his senior colleague on the Staff was Sir William Arbuthnot Lane. Fagge worked with him for a number of years, and their association was reflected in his operative technique, which was conspicuously gentle. His concern with detail and his readiness in all circumstances to expound his actions made him a popular teacher, so that his firm was often the first choice of the majority of the students applying for the post of dresser. His clinical teaching, however, was especially sought after by post-graduate students, particularly by candidates for the Final Fellowship.

During the War, Fagge held a commission as Major, R.A.M.C., and served as Consulting Surgeon to the Red Cross Hospital for Officers at Fishmongers' Hall. In 1917 he went to France, as Lieutenant-Colonel, but he contracted dysentery and was invalided home.

At the Royal College of Surgeons he had a distinguished record. He was elected to the Council in 1921, was Vice-President in 1928, when he delivered the Bradshaw Lecture, and Hunterian Orator in 1936. He was an Examiner in Anatomy in 1909, and an Examiner in Surgery from 1920 to 1930.

Fagge was chosen to represent the Royal College of Surgeons of England at the foundation ceremony of the Royal Australian College of Surgeons in 1932. This was held at Melbourne University, where he presented a Great Mace as a token of friendship from the older College, and was rewarded with the Honorary Degree of F.R.A.C.S., and the Honorary M.D. (Melbourne).

In February, 1938, he resigned all his posts on account of serious ill-health. He leaves a widow and four children, of whom his only son followed him to Guy's.

Post-Operative Wound Infections

A Lecture delivered at Guy's Hospital Medical School on Thursday, 20th April, 1939, by N. L. Eckhoff, Esq., M.S., F.R.C.S.

GENTLEMEN,—Those of you who have recently started a surgical appointment will have been impressed with a notice which appeared in the theatres in these terms :—

" Face masks must be put on immediately on entering the Theatre ante-room. This rule applies to spectators and all members of the Theatre Staff, as well as to members of the operating firm.

" No person with an acute infection of the respiratory tract will be allowed in Theatres.

" Immediately after use, the masks must be put into a receptacle specially provided."

These rules are the outcome of discussion in the Medical Committee on the question of post-operative infection. I may quote you one or two instances that have occurred to me or have come to my notice. Many years ago at a certain hospital—not here—a surgeon was performing his usual operations in the afternoon. Previous to that he had taken his anæsthetist and assistant to a nursing home where he did an operation on a private patient. The patient in the nursing home died and the patients operated on at the hospital that afternoon also died. It was discovered that the anæsthetist had an acute infection of the respiratory tract.

On another occasion there was a patient in Martha Ward who had an enormous œdema of the leg. For this condition Sir Harold Gillies has devised rather an ingenious operation, based on the idea that if you place a piece of normal skin and subcutaneous tissue partly in the leg and partly in the loin above the iliac crest you may be able

to provide lymphatic drainage for the limb, and he has, in fact, performed that operation on several occasions. When this patient arrived here I asked Sir Harold Gillies to come down and assist me with this operation. Together we turned down a flap of skin from the leg, going well above the iliac crest, and also turned down a similar flap of skin from the arm. We sewed the arm flap to the leg, and the leg flap to the arm. That was the first operation, and it was intended to carry out a subsequent operation to complete the procedure. The first operation was performed and the patient was getting on quite well, when one day she developed an acute streptococcal infection and died a few days later. At that time there was in Martha Ward a small child who had had an operation for hernia, and that child died also of acute streptococcal infection. It was discovered that a certain dresser had a streptococcus in his throat, and I do not think there can be any doubt that those two cases were both infected either from the same dresser or from one another, the first having been infected from the dresser.

Some interesting experimental work has been done by C. G. Paine on the use of masks in puerperal infection, with special reference to droplet infection.[1] Paine makes the statement that one in four in an ordinary urban population have a streptococcus in the throat. That is a most remarkable statement, which I have not been able to check. He invented an ingenious model for testing the possibilities of droplet infection. He made a plaster cast which corresponded roughly to the shape of the head, with two orifices to represent the nose and a further orifice to represent the mouth, and at the back of these were two channels, representing the nasal channel and the mouth channel. He then connected to each a funnel and some sort of pump through which he could blow organisms at certain standard pressures on to agar plates at various distances from the model, on the same level and also at levels above and below. He also arranged plates not only in the direct line, but on each side of it. Eventually he got down to a formula to the effect that the plates most often infected were those at some little distance in a direct line in front of the model and those rather nearer and a little below. He showed further that if organisms are blown through the nose cavity or mouth cavity independently, a plate about 15 inches from the model is infected, while if the organisms were blown through both channels at once, infection was obtained on the plate immediately below the model, his suggestion being that the two streams of droplets emerging from the nasal and the mouth cavities collided, and in so doing the droplets lost their velocity and fell on the lower plate.

If all this is true—and one believes it is—then it is clear that there are two danger points in ordinary surgery. One is at a distance of about 15 inches from the mouth, which is the situation of the operation wound, and the other is the surgeon's hands and gloves and overall, which are immediately below his mouth.

This investigator came to the conclusion that the only satisfactory mask was the one which goes by the name of the Cresta mask. It is made of very fine dental gauze of a particular thickness, and so made that it covers the nose, mouth and chin. That mask is as efficient as we can reasonably expect any mask to be, and is the one we are now using here.

Another author, the reference to whom escapes me at the moment, has also shown that if talking is prohibited in the operating theatre the incidence of wound infections falls very remarkably. Quite apart from the difficulty of attempting to give a clinical lecture at the same time as carrying out an operation, I think it is very undesirable for the surgeon to do much talking while actually operating. In the future we may visualise an operation going on in a theatre with a limited operating staff, while the students are placed comfortably in another room where they watch the operation through some kind of television apparatus. It is important to reduce talking to an absolute minimum, and all forms of hilarity, of course, are quite uncalled for either in the operating theatre or the ante-room.

Another surgeon by the name of Meleney has studied this subject very carefully and first instituted a count of post-operative wound infections in the hospital in which he was working, discovering to his surprise that about 15 per cent. of all so-called " clean " operation cases showed some post-operative infection. At another hospital a figure as high as 30 per cent. was revealed. Therefore if we took a careful analysis here we should probably find that from 15 to 30 per cent. of so-called " clean " cases show some infection. This worker has discovered that the organisms chiefly responsible are the staphylococcus aureus, the staphylococcus albus, the streptococcus hæmolyticus, and the non-hæmolytic type of streptococcus, *B. coli communis*, *B. subtilis*, *B. pyocyaneus*, *B. proteus*, diphtheroids, and sometimes the organisms of tetanus and gas gangrene. In 1930 I investigated 23 cases of gas gangrene occurring at Guy's, 11 of which followed " clean " operation.[2]

In another investigation, 35 per cent. of the operating staff were found to have a hæmolytic streptococcus in the throat, and some of them in the nose as well. To find the actual culprit it is necessary to check the group and type of organism causing the infection in any particular case. In

one such case the instrument nurse was clearly the harbourer of the streptococcus. This is why it is important for us to take special care in the ante-room, because it is there the instruments are usually prepared, and any carelessness in that quarter would be just as serious as carelessness in the theatre itself.

I will now mention the different modes of entry of organisms apart from droplet infection. First we have to consider the articles we use—sponges, instruments, knives, catgut and lotions. Then we have to pay attention to the question of dust in the theatre, the possibility of infection from the skin, deep tissues, and blood of the patient, and, apart from the nose and throat of the operating staff, on which I have already touched, we have also to think of their hands.

I should like to mention to you the methods used for sterilising these different articles. Incidentally, this is a question sometimes asked you in examinations. We start with those articles that normally go into the *autoclave*, including the gauze, sponges, operating gowns, masks, caps, etc. Each particular autoclave has its optimum temperature and time, and it is necessary for the bacteriologist to investigate the materials from time to time to see that proper sterilisation is carried out. It is obvious that if you are responsible for a particular autoclave you will work in conjunction with the bacteriologist in determining the correct temperature and time. A letter has been published in the *British Medical Journal* this week[3] suggesting that the French chalk we use for our gloves is difficult to sterilise, and that is being studied here.

Coming to *boiled* instruments, all the ordinary instruments, excepting knives and cutting instruments, are put in to boil. In addition to these, silk and salmon-gut are boiled. In parenthesis one may say that silk cannot be boiled more than once or twice, as it loses its tensile strength, but salmon-gut can be boiled frequently without any great loss. From five to ten minutes is usually considered the right time for boiling, and if the boiling is carried out properly it is safe, but one has to beware particularly of instruments handed to one in a time of stress in the middle of an operation, when that sterilising time may be cut down.

Antiseptic sterilisation includes scissors and knives and a number of other things, particularly sharp instruments, and also tubes of catgut. In general, I must say that 15 minutes in 70 per cent. alcohol is quite unsatisfactory for the sterilisation of these things. Recently in this hospital there was a patient who developed meningitis after lumbar puncture, and at that time Dr. Knott investigated the sterilisation of needles and syringes with spirit and came to the conclusion that it was not reliable. I am told that certain organisms can live in spirit for a great number of years. The only thing that seems to be satisfactory is dry sterilisation or a concentrated solution of phenol (or lysol) for 15 minutes. It is true that efficient methods of this kind are used in the Theatres, but I cannot say that it is clear that they are used for the sterilisation of these articles in the wards, the Out-Patient and other departments. Only this last week in the *British Medical Journal*[4] there was a leading article on this subject which was very disquieting to those practitioners who have to sterilise their own instruments. It pointed out that alcohol was not satisfactory for the sterilisation of needles, syringes, etc. We have not, unfortunately, yet developed a certain technique for the sterilisation of these things, and we ought to see that, wherever possible, they are boiled or put in the autoclave, for that is very much more reliable.

Passing on to catgut, this has been a matter of so much concern to people in authority that the Home Office a year or two ago issued a memorandum on the subject. They had discovered nine cases of tetanus which they thought were traceable to the catgut. I thought you might like to know something about the preparation of catgut. The material used is the small intestine of the sheep. Once it has been obtained it is either put into alkali, or sometimes into salt, or on other occasions frozen. Therefore the first thing necessary in the preparation of catgut is to take the material and soak it or thaw it to get it into a pliable state. The next thing is the operation of splitting the catgut. This is done by an instrument with an ivory point, behind which is the edge of a sharp knife. The intestine is drawn over the ivory point and goes on to the edge of the knife and thus it is split. It is said that it takes about two years to train a man to do this work. The next thing is the scraping. In the scraping process the serous coat of the peritoneum is removed, also the mucous and muscular coats, so that all we have left is the sub-mucosa, and it is in fact the sub-mucous tissue of the intestine of the sheep we use. After that the catgut is measured into suitable lengths, spun into a thread form, then dried and polished, and only at the end is it sterilised. All sorts of agents have been used for the sterilisation of catgut. The Home Office report contains an account of the investigation of them all, and comes to the conclusion that the only satisfactory solution is a mixture of iodine and potassium iodide and a certain amount of potassium iodate. The exact length of time

of sterilisation is important. As a rule the catgut is kept in this sterilising solution for about a fortnight, and then gradually put through alcohol or some other solution to remove the excess of iodine. It is unsafe to rely upon the sterilisation of catgut by amateurs and much better to use catgut supplied by certain reputable firms under Home Office licence.

The *cleansing of the hands* is another interesting matter. Roche, who was a student here, wrote a most interesting paper, for which he received a prize from the Physical Society, on the question of sterilisation of the hands.[5] He did all this work while he was a dresser, and he must have been most assiduous. He started off by exposing agar plates in Theatre VI, others in a small house in the Borough, and others again in the middle of the North Sea. He was able to do this last because he owned a yacht. He discovered that the agar plates in the North Sea were completely sterile; those in the theatre grew a certain number of colonies, and the one exposed in a house in the Borough, a great many more. He went further and exposed plates in different parts of the Hospital for five minutes, with the following results :—

	Colonies
Dorcas	16
Astley Cooper	50
Christopher	30
Patience	18

It is clear, therefore, that the number of organisms diminishes as one goes up the stairs. In Christopher Ward he went further and exposed plates on the floor, where he found 45 colonies, at bed level, where he found 35, and 7 feet up, where he found 22. He also exposed plates in the following situations :—

	Colonies
Front Surgery	70
Back Surgery	100
Subway	100
Bacteriological Laboratory	75
Ultra-Violet Light Department	11

These figures are rather interesting. But Roche's chief work was on the question of the hands. He found that if a culture were taken from the unwashed hand it would grow something like 50 colonies. The colonies were too numerous to count, but I give the ratio. The hand, after washing for 1½ minutes in running water with soap and brush, showed 30 colonies. After drying with an ordinary towel, it showed 40, after washing for a further 1½ minutes it showed 20, while a glove which was boiled for five minutes showed no colonies at all. (In those days all the dressers and many of the surgeons used wet gloves.) Roche also discovered that if one continued washing the hands or scrubbing them one did not necessarily make them any cleaner—in fact, the reverse. When the skin is soft and smooth, the more the hand is washed the cleaner it becomes, but if it is rough from repeated washings further washing may produce more organisms. A further point is that immersion of the hand in antiseptics appears to make little difference to its cleanliness. Dr. Knott was rather interesting on this point. The spirit which most of these solutions contain at once produces a sort of coagulum on the surface, and really does not do much more than that. It, so to speak, fixes the organisms, but does not render the part much more sterile.

Starting with a glove boiled for five minutes, and touching various articles in the Theatre, Roche found more organisms on the assistant's arm than on the Theatre floor.

It is clear that the wet glove is more difficult to put on than the dry glove. The wet glove itself is sterile, but organisms may be taken up in the effort to get it on the hand. In the case of the dry glove, one naturally tries to put it on without touching the outside of the glove with the naked skin. In some theatres the nurse opens the glove for the surgeon to slip in his hand, but the question which always occurs to me is how the nurse got her own glove on. Further, of course, if the glove becomes pricked it is no longer aseptic. There is a considerable amount of evidence that it would be advantageous to do dressings in the wards wearing gloves, but if these are not available it is desirable never to touch the patient with the hand if it can possibly be avoided. Instruments only should be used in doing all dressings. I recommend you to glance through Roche's original paper.

The next thing is the *skin of the patient*. It is customary to attempt to cleanse the skin of the patient before the operation, and in some hospitals an aseptic dressing is applied to keep the part clean. Although some sort of cleansing can be achieved by washing the part, organisms grow from the hair follicles and other parts, so that in a short time quite a big count of organisms can be obtained from the surface. However, we do attempt to remove the excess of these organisms by cleansing with some oil solvent such as ether, and again, when the patient arrives in the theatre, we cleanse the skin with spirit, iodine, picric acid, flavine, gentian violet or mercurochrome. With iodine and picric acid, however, an intense dermatitis may follow, and I have given up using these substances. Their use may mean that a patient will have an unpleasant time for two or three weeks. It is usual to make one thorough

cleansing of the skin when the patient arrives in the theatre, and thereafter to avoid as far as possible exposing the patient's skin for a longer period than is absolutely necessary.

Now as to *organisms in the air*. Quite recently an article appeared by Cruickshank and Godber on the spread of infection by air contamination.[6] This particular study was conducted in a fever hospital. Infections in cases of burns after admission to the hospital were noted, and the same type of organism was isolated from eight patients, and in one case was recovered from the air of the ward. As long ago as 1902 Washburn and Eyre recovered a pneumococcus from the dust not only of the ward, but of the laboratory; and other organisms, notably streptococci, have been found by other workers. The disturbance of the air by dusting and sweeping undoubtedly increases the number of organisms, and a streptococcal throat infection occurred in a person sweeping the floor of a room which had been vacated five days previously by a woman suffering from puerperal fever. In a ward in which all the patients were in bed it was found possible to recover responsible organisms from the air, and the workers suggested that free ventilation, especially in the winter, should be installed and the possibility of sterilising the air either by spraying it with disinfectants or by the use of ultra-violet light. It was thought that these measures might help in the reduction of infection from air organisms.

Once again I submit that this is a thing on which we cannot give any final ruling. It is a very difficult problem, but one that must be borne in mind. The general observation may be made that one should as far as possible reduce the operating time, the time of exposure of the wound. It is interesting to note that in the article I have already quoted from the *Lancet*, disinfection and spraying of the air was again suggested, which reminds us, of course, of Lister's original carbolic spray.

The next point is the *susceptibility of the patient* and the possibility that the patient may have an infection in some distant part of the body. In this connection I can think of two cases. One was a patient upon whom I performed the operation of cholecystectomy. This patient had a scar of a pelvic operation in the lower part of the abdomen, and after the cholecystectomy a hand was passed into the lower abdomen, but nothing else was done. She developed an acute infection around the lower abdominal scar in the form of cellulitis, and she got a streptococcal hypopyon in the eye. She died, in fact, of streptococcal septicæmia.

Another patient had an abdominal tumour, of the exact nature of which I was not certain. A barium enema revealed a colon that was pushed over by the lump in the abdomen, and it also revealed a little shadow in the pelvis which at first was taken to be a phlebolith. Under a local anæsthetic I passed a ureteric catheter, which went 5 cm. up from the internal ureteric orifice. The operation took only a few minutes, and the patient was sent back to bed. Within 48 hours he was dead of streptococcal septicæmia, and we discovered that not only did he have a pyonephrosis with the streptococcus in it, but the same streptococcus was cultured from the colon and the tonsil. I can only suggest that in this patient a relatively minor disturbance was sufficient to cause the flare up of the streptococcal infection which he already had.

So much for the actual presence of organisms. We can also render a patient more susceptible to infection by *careless surgery*, that is by allowing hæmorrhage to occur, by including large masses of tissue in ligatures, by putting in stitches under great tension, and by putting drains of various sorts into wounds unnecessarily. If a hæmorrhage occurs that wound will run a much graver risk of becoming infected. We know the danger of operating on hæmatomata. One patient appeared with a hæmatoma over the tibia, and with a knowledge of this danger I was bold enough to make an incision and evacuate the hæmatoma. After five or six days she was better and allowed to go home, and her practitioner was asked to remove the stitches. She was a private patient, and I wanted to save her the expense of remaining in the hospital. The practitioner accordingly attended one day and removed the stitches, and the husband volunteered that he merely took a pair of scissors out of his bag and did what was necessary. The woman was back in hospital within 36 hours with a temperature of 105 degrees, and she died of streptococcal septicæmia. On the second day when the practitioner was called back owing to the woman's condition he rather gave himself away because on this occasion he carefully sterilised his instruments, but, of course, this was too late.

I believe it is a bad thing to keep on pulling out bits of rubber and replacing them in the wound. It is perfectly true that on occasion a clean wound must be drained for a day or two, but once that has been achieved the rubber tissue can usually be disregarded.

Suture material is a very important matter. I have already hinted at the danger of serious infections from catgut—infections with tetanus. But there is a good deal of evidence that minor infections can also occur and Meleney in his

investigation discovered that in patients undergoing operations such as mastectomy or thyroidectomy, or operations for recurrent hernia and ventral hernia, and open operations on fractures, the infection rate was relatively high. He then did ten thyroid operations with silk and got no hæmatomata and no infections, whereas out of ten cases with catgut there were four hæmatomata and two infections. He went further and studied a series of 1,000 mixed cases, 656 done with silk, in which the incidence of hæmorrhage was 4.6 per cent. and of infection 2.3 per cent., and 306 with catgut, in which the incidence of hæmorrhage was 6.5 per cent. and of infection 9.2 per cent. It was surprising to me to read that hæmatomata and infections occurred in such a large percentage in thyroid operations. But if we took a careful survey of the operations here we might come to the conclusion that these figures are correct. One's personal impressions are not always reliable. The investigations also showed that linen thread was not as good as silk, and a combination of catgut and silk was much worse than silk alone. It may be imagined that silk will produce much more reaction in the patient, but that, as a matter of fact, is not true. The use of catgut, because of the fact that it has to be absorbed by the patient's own reactions, naturally means that there will be a good deal of thickening and induration around the ligature, whereas the silk ligature is quickly encapsulated and remains there as a foreign body without any particular effort on the part of the host to get rid of it. If infection does occur, there is likely to be slight trouble from extrusion of little silk ligatures.

Finally, there is the question of infections occurring *after the operation.* There are some people who put no dressings on wounds at all, leaving the wounds exposed to the air, and say that their incidence of infection is not high. I have always rather felt that once an operation is performed and the dressings are applied there is not any great risk of re-infection during the period that the patient is in hospital, but that quite certainly does not always hold good. If we have a perfectly clean wound, which is sutured accurately, and coagulum develops along the line of incision, re-infection may be said to be unlikely, but in any wound where a raw surface is left it is quite obviously possible to get later infection, as in the first case I quoted in this lecture, that of the plastic operation on the leg.

As a final note it may be added that if the wound becomes infected, the patient stays in hospital much longer, and that, of course, is a matter of economic importance. Even more important is this, that nowadays we seem to have a much greater sense of legal responsibility. You will all recall the case of a surgeon who was recently sued by a patient alleging an error in injecting uroselectan into the arm, though he was absolved by the Court. Nowadays people are quite likely to argue that if an infection occurs after a hypodermic injection of a drug the doctor is liable, and if an infection occurs after an operation the surgeon may equally be considered liable. Therefore I think this whole subject is one to which it has been worth while to direct your attention.

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5. *Guy's Hospital Gazette*, 1926, vol. xl, 86.
6. *Lancet*, 1939, I, 741.

The Doctor, the C.I.D., and the Witness Box

Opening Address to the Pupils' Physical Society, delivered in January, 1939, by Ex-Divisional Detective Inspector John Harris, Metropolitan Police

MR. CHAIRMAN and GENTLEMEN,—Although I do know something of the witness box, and can claim a long acquaintance with the C.I.D., my knowledge of medicine is confined largely to its relationship with crime. It is in this connection that I have met members of your profession, and it is of the co-operation between doctor and detective that I am going to speak first. If I offer criticism of doctors during the evening, please accept that I do so with the sole purpose of benefiting both the medical profession and the one to which I was proud to belong; helpful criticism hurts no man, it is the destructive critic who is a danger. Each generation benefits by the mistakes of its predecessors—and makes the errors from which the following generation derive benefit.

The more usual cases calling for medical evidence are crimes of violence involving personal injury, drunkenness, indecency, perversion, rape or carnal knowledge, and as a rule the crime has taken place or is alleged to have been committed before the doctor is called. A similar difficulty also confronts the detective, and it is by the painstaking collection of evidence relating to the

case, rather than by the statements of actual witnesses, that convictions are eventually obtained.

Many people hold the mistaken opinion that a detective is only concerned in securing convictions. On the contrary, it is his duty only to collect the evidence, whether it be to prove innocence or guilt, and to see that it is laid before a Court. I have spent much of my time in proving people innocent of the allegations made against them, whether by others or by themselves.

In such investigations the doctor has an important role to play. Every detail of the observations he makes may eventually prove to be of the greatest importance, and no pressure of work should deter him from recording at the time his own observations in such a way that he can later give the fullest assistance to the detective and any Court to which he may be called. I remember well how a small detail—strangely enough in a statement from Kennedy, one of the accused—about a white gate and a dog which barked behind it at a certain time, proved of the greatest importance in linking together the evidence in the case of the murder of P.C. Gutteridge in which I was engaged.

Many people marvel at the memory which a good detective possesses, and the apparent ease with which he can detail the scene of a crime to which he has been called. To some extent it is due to his training. When he arrives on the scene he first obtains what I will call " the mind picture " of what confronts him, and it is advice which I suggest to you in the very strongest terms. I have often stood for as long as ten or fifteen minutes at the scene of a crime without speaking. People may have thought I was making a pretty slow start on the trail of the criminal just standing there, but I was collecting valuable evidence and imprinting it firmly on my mind; months, even years, after I could again bring back vividly to mind the scene of a crime—and recall perhaps some important little detail the value of which was not apparent at the time.

I do not suggest, of course, that where you are confronted by a victim who is fast bleeding to death you should spend much time on a survey of that kind, but even under these circumstances you should be making lightning impressions of some of the details—the position of the body and its relation to the furniture. Always, too, make the request that nothing be touched until the arrival of the police—it may later save you much embarrassment.

The police officer makes a record of his findings in his official notebook, and is permitted by law to refer to them subsequently to refresh his memory. That permission is also open to any witness, and I commend the habit to all doctors. Make written notes immediately you have concluded your examination. I will refer to the importance of these when I speak of the Witmess Box. And when you are asked for a statement arrange to give it at a time when you are not hurried; the statement will be worth twice as much if an extra five or ten minutes' care is spent in its preparation. The senior detective is a man who is steeped in worldly knowledge, already has the important details of a case in his mind, knows more or less what he wants from you, and can safely be allowed to ask you specific questions the answers to which can provide the body of the statement. I adopted the plan of telling the doctor what I desired him to deal with and gave him my reasons for this, and I believe that such a policy, a mutual assistance policy, achieves the best results. Never be above letting a detective improve his knowledge if he is keen to do so. Give him the opportunity to see you at work on the problem if it is proper; the master of his craft never minds others watching him—it is the " dud " who seeks to work alone.

Go out of your way, if it is reasonable so to do, to help the detective, and he will go out of his way to help you. I remember a case of stabbing at Barking in which two days' delay and many time-consuming journeys resulted from the doctor's refusal to allow me a few moments with the victim; it was not a serious case, for she was out of hospital within five days. But every hour may give another vital hour's opportunity for escape to a criminal.

Now let me give you some illustrations of the pitfalls which I hope you will avoid. In a case of rape a young girl was brutally assaulted by a boxer and, after wandering about for several hours, reached home in the early hours of the morning and told her mother. She was taken later that morning to a doctor, who ascertained only that she had been assaulted. Two days later the mother, under pressure, took the girl to the police station, where a police surgeon certified recent forcible penetration, with rupture of the hymen and local bruising. Detectives who were called recovered the clothing torn and blood-stained from a dustbin, and a full story was set down; it revealed that she had bitten the hand of her assailant, and a man with such an injury was later identified by the girl and subsequently sentenced to penal servitude. Now where a grave matter of this kind rests with the evidence of one witness it is the duty of the doctor to spare no effort to reveal information which may help to corroborate—or disprove—the allegations. If the prosecution had had to rely on the evidence of the

doctor who first saw the girl they would never have had any evidence as to the actual nature of the assault, and no conviction could ever have been obtained.

The ultra-cautious doctor is equally unlikely to help in criminal detection; he must be prepared to go as far as his findings justify, and remember he is an expert, and allowed therefore to give his opinions on the facts. It is his duty to make himself acquainted with the law in so far as it concerns him, so that he may frame his statements in a helpful way. To say a man is " not drunk " or " recovering from the effects of alcohol but not now unfit to drive a car " misses the whole point of an examination under Section 20 of the Road Traffic Act. The examination should be directed solely to whether at the time of the alleged offence the person was so under the influence of alcohol as to have been unfit to have proper control of a car.

Sheer carelessness is even worse; a doctor was called to view the body of a newly-born child found in a sack on the foreshore at Barking. He saw that it had an extensive head injury and, without further ado, gave the opinion that it had met its death through being struck on the head; the police officer properly construed this as murder, and so informed the " Yard." Post-mortem examination revealed that the child had never had a separate existence and that the head injuries were quite consistent with the sack being caught in the screw of a river barge. Incidentally, the doctor had failed to give the correct sex of the child; he had clearly forgotten to assure himself of it at the time, and had later guessed at it. He had also forgotten that he need only have asked for immediate post-mortem in order to determine the one important point, namely, whether there had been a separate existence; gaily to venture opinions without any basis is to court disaster.

There are cases, too, where failure to give one's directions clearly and precisely results in unwitting obstruction to effective criminal detection. A doctor, called to a woman found in a room of great disorder with severe head wounds, told a neighbour she could clear up the mess. This neighbour cleaned up everything in the room, including some beer glasses on which the police might well have found tell-tale finger-prints. The doctor said he was sorry he had only meant the patient could be cleansed. There was insufficient evidence to bring a charge.

Doctors who feel a little shy of expressing opinions on medico-legal matters sometimes allow themselves to be persuaded by attendants and mortuary-keepers. In a case where a woman had been found dead in a house inhabited only by herself and her husband the mortuary attendant pointed out to the doctor some white marks on the neck which he suggested were marks of strangulation by a ligature. The C.I.D. and an expert were called in, the husband meanwhile being questioned closely as to his version of the events. The marks proved to be merely folds in the skin of the neck, accentuated by post-mortem lividity in the surrounding skin—but suspicion had been focussed on that perfectly innocent husband and he had been subject to what must have been most distressing inquiries.

The doctor himself must satisfy himself on every point which arises: the position of things and persons, situation and nature of wounds, demeanour of other occupants of the household. He must be prepared later to state what he first saw and noted, and with confidence that what he says is true. There must be no guessing or hesitation, no mistakes. A case of mine nearly failed once because a doctor who was shown a plan of the room where a criminal assault had occurred placed the victim at the opposite end of a table to that at which she actually was; the doctor had previously stated the correct position, but was flustered by the atmosphere of the actual trial. The defence almost succeeded in the suggestion that the firearm which had caused her wounds had been discharged not *at* the woman to kill, but to one side of her in order merely to frighten.

I do not wish to suggest to you, on the contrary, that you should permit persons who are suffering to continue to lie in pain in order to provide evidence for criminal detection—or, worse, that you should stand by while someone is dying when quick removal to hospital might save them. There are times, however, when delay in acquainting the police is vital. I remember a case where a woman lay in hospital and was operated upon for extensive bruises and deep injuries, and subsequently died —some eight days later; only then was information given to the police. Post-mortem revealed she was pregnant, and that the injuries were consistent with a most brutal attack with fists and possibly also boots with the object of terminating this pregnancy. As a result of the delay, inquiries (now bereft of the only important witness) failed to result in the proper punishment for what was no less than murder. It is not that doctors should become police informers—their code does not permit that, but that when the safety of others and the rightful detection and punishment of criminals lies in their hands they should not hesitate to place adequate information in the hands of the police. Where in cases of assault death is likely to occur, it is most vital that the police

should be given an opportunity to take a statement from the victim. The circumstances are not infrequently those of interference with a pregnancy, usually of instrumental interference followed by fatal infection. Very often the sick person is the only one who can give information likely to assist the police to trace the abortionist. I know that many women die every year without the police being informed, and perhaps, where the interference is self-practised, the police do not always wish to know and prosecute; but where some dirty and dangerous professional abortionist is at work in a district, reaping a £2 5*s*.-a-time harvest from unfortunate girls and women as well as placing them in danger of their lives from sepsis—then no doctor or nurse should hesitate to tell.

Now let me say something about the Witness Box.

Remember the constant dictum of all Judges: the verdict will be reached upon the evidence placed before the Court, and on nothing else. The witness should be precise and scrupulously fair. A medical witness belongs to the select class of "expert" witnesses who are allowed to give opinion as evidence, and it is incumbent upon him to weigh carefully his replies both to Prosecution and to Defence.

I have already stressed the importance of making notes. These should be taken to Court. In England, cases of a criminal nature may be heard in two successive Courts, the Magistrates' or Police Court and subsequently in the Assizes, as, for instance, at the Old Bailey. You will appreciate how important it is for the doctor to have his facts and views crystal clear when I tell you that everything he says at the earlier hearing is taken down and supplied to the Judge and Counsel before the actual trial in the higher Court. He will be examined by Counsel, who will have his earlier statements in his hands for reference. The doctor must not be lulled into a sense of security by absence of any sort of cross-examination in the lower Courts, for it is a common practice to reserve such an examination until actual trial.

Now let me suggest some simple "Do" and "Don't" points:—

Do enter the Court in a respectful manner.

Do appear in professional dress—a sports coat and flannel trousers is not the best way to appear before a Judge. You will be scoring points before even you open your mouth if your conduct and dress are such as to do credit to your profession.

Don't gabble through the oath. The wording varies in different Courts, and you would do better to read the card which is placed before you than to air your knowledge of the procedure. Do as the usher says—read it *aloud*. There is nothing more exasperating for Judge, Jury and Counsel than a witness who cannot be heard.

Do listen to a question before you answer.

Do stand up straight; lounging over the edge of the box is slovenly and may create an impression of indifference. Place your notes in a convenient place on the ledge in front of you and refer to them as often as you wish.

Do not guess at an answer. If you do not know then say so at once. Reply "I do not know," "I cannot say," or "I am not qualified to give an opinion on that." The question might be a "trick" question to steer you into a difficult position.

Do give correct titles to persons who ask you questions. A Judge is entitled to "My Lord," a County Court (Civil) Judge to "Your Honour," a Magistrate to "Your Worship," and Counsel and Clerks to the Courts may properly be addressed as "Sir." It costs nothing and gains respect and courtesy.

Do try to give your evidence in a language which an ordinary lay jury can understand. If you must use a medical term to describe accurately a position on the body, then point to it at the same time. If it is a disease, then say what it is called at the same time describing its essential nature in simple language. The use of expansive medical language may lay you open to ridicule. Remember, a Coroner and even a Counsel may be a medical man like yourself.

Do try to make your answers as short as possible. Where "Yes" or "No" will suffice, leave it at that. By elaboration you may say something which places you in an awkward position or introduces matters which only complicate the issue.

Do try to eradicate nervousness. I know it may not be easy with your first appearances. Reading through your evidence with a companion and trying to anticipate your cross-examination questions may help you.

Do not lose your temper—ever.

Do be prepared for questions which "lead you up the garden path." Be careful to confine yourself to what is strictly true and a reasonable opinion on the facts, and you will not be "tripped up" and have your evidence turned against you.

Lastly, contrive to be efficient and well informed about your work. It is the making of a good and impressive witness, whether he is experienced or not.

Correspondence

Moral Re-armament

To the Editor of the GAZETTE

SIR,—The undersigned, realising the critical condition of the world, are convinced that Moral Re-Armament is an integral part of National Service.

We wish to draw the attention of everyone at Guy's Hospital to a collection of letters of great national significance, written by responsible men at the cross-roads of history. It is called " Moral Re-Armament—the Battle for Peace," and is edited by H. W. " Bunny " Austin. It is on sale at the Guy's Shop, price 6*d*.

Guy's Hospital can be in the forefront of a movement which will cure the world.

Yours faithfully,

E. MacMANUS, *Matron.*
Sir FRANK PEARCE, L.D.S., R.C.S.
B. L. READ, *Secretary to the Governors.*
J. FARMER, *Appeal Secretary.*
J. H. E. WINSTON, *Secretary of the Medical School.*
J. MOORE, *Head Pharmacist.*
W. GREENWOOD, *Manager of the Works Dept.*
T. B. LAYTON, M.S.
SYBIL M. EVANS, *Sister of the Massage Dept.*
Professor FENN, L.D.S.
F. A. KNOTT, M.R.C.P.
F. BOCQUET BULL, *Sub-Dean of the Dental School.*
KENNETH HOOPER, L.D.S., M.R.C.S., L.R.C.P.
F. N. DOUBLEDAY, L.D.S., M.R.C.S., L.R.C.P.

Guy's Hospital, S.E.1.

Sport

Cricket

GUY'S *v.* PRIVATE BANKS

GUY'S started their season on Saturday, May 6th, in a most satisfactory manner, beating the Private Banks at Catford Bridge for the first time for fourteen years. Perhaps the most encouraging feature of the game was the high standard of fieldng displayed by the Hospital side, very few runs being given away and all the catches offered being held.

The Private Banks won the toss and chose to bat, but they were soon in trouble, having six wickets down with only 19 runs on the board.

R. L. Skea has now returned to the Hospital after several years' absence, and immediately had the Banks' batsmen in difficulties. At one time he had taken four wickets for three runs, and finally finished with the excellent figures of six wickets for 22 runs. By 4 o'clock the Private Banks were all out for 77.

The Guy's batting was not of the same high order as their fielding, several batsmen lifting the ball dangerously when it might well have been kept on the ground. But the Banks' total was passed with six wickets in hand; Guy's, with a total of 109, Morey (25) and Birks (24) being the top scorers.

Scores.—Private Banks, 77 (Skea, 6 for 22; Knight, 3 for 14; McClintock, 0 for 15; O'Gorman, 1 for 17).

Guy's

G. O'Gorman, c. and b. Blessley	1
A. V. Hurst, c. Hayles, b. Jones	8
G. H. G. Chase, c. Cook, b. Ward	19
L. G. Morey, c. Blessley, b. Hayles	25
P. H. Birks, c. Hayles, b. Blessley	24
D. C. Boyd, b. Richards	17
H. A. Thomas, b. Black	1
S. N. Cole, c. Dawkins, b. Richards	0
R. L. Skea, not out	3
C. L. T. McClintock, b. Jones	10
J. H. H. Knight, l.b.w. Jones	0
Extras	1
Total	109

Blessley, 2 for 28; Ward, 1 for 23; Jones, 3 for 24; Hayles, 1 for 15; Black, 1 for 10; Richards, 2 for 7.

GUY'S *v* THE WANDERERS

ON Wednesday, May 10th, at Honor Oak Park, Guy's lost to the Wanderers by the narrow margin of 4 runs, after seeming, at one time, to be within easy reach of a comfortable victory.

Batting first on an easy hard wicket, the Wanderers scored 116. They might well have scored many more if Merry, the West Indies batsman, had not been l.b.w. to a ball from Skea which kept low and came in sharply. Except for Surridge, who hit the ball very hard when he connected, and Bassett, who scored most of his runs by snicks through the slips, the remaining Wanderers' batsmen failed to make any very marked alteration to the score.

Guy's started their innings in fine style. The fast bowling of Baring, the Hampshire player, and Surridge caused O'Gorman very little trouble, although Thomas, at the other end, did not seem quite so happy. Runs came at will, over one a minute, and when the first wicket fell the score stood at 64. Then occurred an incident which is worth recording, even if only for its rarity, namely, Chase was bowled first ball!

O'Gorman completed a very attractive and chanceless fifty, and was then caught at the wicket. Morey raised our hopes of victory by producing some well-timed off-drives, but he unfortunately fell victim to the slow bowling of Gadsby.

With the exception of Hurst and McClintock, the remaining Hospital batsmen offered little or no resistance to the fast bowling of Surridge, who produced some really good balls and took seven wickets for 42.

Scores.—The Wanderers, 116 (Knight, 5 for 30; Morey, 2 for 16; Skea, 2 for 49; McClintock, 1 for 21).

Guy's

G. O'Gorman, c. Bassett, b. Gadsby	51
H. A. Thomas, b. Surridge	14
G. H. G. Chase, b. Surridge	0
L. G. Morey, b. Gadsby	8
D. C. Boyd, b. Surridge	0
A. V. Hurst, b. Surridge	11
S. N. Cole, b. Surridge	0
R. L. Skea, b. Gadsby	2
J. R. Landler, b. Surridge	1
C. L. T. McClintock, b. Surridge	6
J. H. H. Knight, not out	1
Extras	18
Total	112

Baring, 0 for 30; Surridge, 7 for 42; Gadsby, 3 for 22.

Golf

GUY'S has again re-established itself at the top of inter-hospitals golf. The Hospital won the Inter-Hospital Stroke-play Cup, which was played for at Worplesdon on Wednesday, 19th April.

Those returning the best scratch scores over 36 holes for Guy's were J. W. R. Drury, S. A. Marsh and J. C. Ritchie.

The most serious opposition came from St. Mary's, who were leading at Lunch-time by a few shots, owing to a brilliant round of 72 by D. I. Stirk. J. C. Ritchie for Guy's, however, had a good morning round of 74.

In the afternoon, when conditions were more difficult, the Guy's men settled down to play steady golf; Drury, in particular, played a fighting round and returned 80.

The Guy's golfers were fortunate in starting early and setting the rest of the field a score to shoot at.

The Guy's total proved too good, and St. Mary's were finally beaten by three shots.

Middlesex Hospital were third and Charing Cross fourth.

In the handicap events, too, Guy's were successful. Ritchie won the morning prize with 74—5 =69 and Drury won in the afternoon with 80—8 =72.

GUY'S v. WIMBLEDON PARK

THE Hospital did very well to draw their match with Wimbledon Park Golf Club, who turned out their strongest club side.

For the Hospital, Praat and Ritchie played well to give the side a good start.

Drury, playing third, was round the course in 72, and won an exciting match on the last green.

Steven, a newcomer to the team, had a good round of 75, and won his match by a substantial margin.

Results were as follows:—

Guy's		*Wimbledon Park*	
T. N. Praat (2 up)	1	H. F. Goodman	0
J. C. Ritchie (3 & 1)	1	C. G. Kenyon	0
J. W. R. Drury (1 up)	1	V. B. Durant	0
S. A. Marsh	0	A. I. Riley (1 up)	1
J. G. Mathewson	0	O. S. Martin (2 & 1)	1
P. F. E. Brown	0	D. E. Kenyon (3 & 2)	1
D. C. Stephen (5 & 4)	1	E. Battersby	0
W. B. Saunders	0	F. E. Kewley (3 & 2)	1
Total	4	Total	4

Result.—A draw.

Hospital Information, etc.

Notices

MEMORIAL SERVICE

A Memorial Service to the late Mr. C. H. Fagge, Consulting Surgeon to the Hospital, was held in the Hospital Chapel on Tuesday, May 23rd, at 1.50 p.m.

GUY'S BIENNIAL DINNER

The Guy's Biennial Dinner will be held on Friday, December 8th, at Grosvenor House. Time, 7 for 7.30 p.m. Tickets, price 12*s.* 6*d.* All Guy's men, Medical and Dental, who are qualified are cordially invited. The tables are arranged so that friends and contemporaries sit together, and the date is published now in the hope that the time may be reserved and the attendance maintained. All whose names appear in the *Directory of Guy's Men* will receive a communication through the post, giving details of the arrangements together with a form of application for tickets. These notices will be sent out in the early Autumn.

GEOFFREY MARSHALL,
Hon. Secretary.

STEPHEN PAGET MEMORIAL LECTURE

The Stephen Paget Memorial Lecture will be given this year by Sir Edward Mellanby, K.C.B., K.H.P., M.D., F.R.C.P., F.R.S., at the London School of Hygiene and Tropical Medicine, immediately following the Annual General Meeting of the Research Defence Society on Tuesday, 13th June, 1939, at 3 o'clock.

The title of the Lecture is " The Experimental Method in the Conquest of Disease " (illustrated), and Guy's men are invited to attend.

The Chair will be taken by the President, the Rt. Hon. Lord Lamington, G.C.M.G., G.C.I.E., supported by the Hon. Sir Arthur Stanley, G.B.E., C.B., Chairman of the Committee, Sir Henry Dale, C.B.E., F.R.C.P., F.R.S., and Professor A. V. Hill, O.B.E., Sc.D., F.R.S., Vice-Chairman of the Committee.

ELMORE MEDICAL RESEARCH STUDENTSHIPS

The Board of Management of the Frank Edward Elmore Fund will shortly proceed to the award of two Studentships for research in medicine. The Studentships are open to male graduates of any University who were born in any country within the British Empire other than Scotland. The students appointed will work in the Department of Medicine of the University of Cambridge under the direction of the Regius Professor of Physic. The commencing salary will be £300 a year, and the appointment will be for two years in the first instance.

Further information may be obtained from the Regius Professor of Physic, Department of Medicine, University of Cambridge, to whom applications, together with three testimonials, a statement of previous appointments, and copies of published papers, should be sent not later than 20th June, 1939.

Pass List

UNIVERSITY OF CAMBRIDGE.

May, 1939.

The following Degrees have been conferred :

M.D.
D. P. King.

M.A.
D. P. King.

Papers by Guy's Men

Ryle, J. A. Clinical sense and clinical science. *Lancet*, 1939, i, 1083.

Smith, R. E. Observations on the descent of the testicle with special reference to spontaneous descent at puberty. *Arch. Dis. Childh.*, 1939, lxxvii, 1.

Macintosh, R. R., and Another. The impacted molar : Mechanical devices to improve operating conditions. *Brit. Dent. J.*, 1939, lxvi, 575.

Hunt, B. W. White spot sclerodermia with facial hemiatrophy. *Proc. Roy. Soc. Med.*, 1939, xxxii, 723 (Sect. Derm.).

Law, Frank. Retinitis pigmentosa and Coats' disease. *Ibid.*, 759 (Sect. Ophthal.).

Change of Address

Dr. and Mrs. H. M. Kelsey, The Red House, Rudgwick, Sussex.

Appointments

J. T. Irving, M.D. (Cantab.), of the Rowett Research Institute, Bucksburn, Aberdeen, has been appointed Professor of Physiology, Cape Town University.

Births

ELVEN.—On April 29th, 1939, at Clare Lodge, Staines, to Phyllis, wife of Richard T. Elven, M.B., B.S.—a son.

KING.—On April 30th, 1939, at Nuffield House, to Pamela, wife of Donald King—a son.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

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PASSIM

A NEW week is no fault at all, though tradition has branded it as one. We condemn Monday not for any property of its own, but for its position in the weekly rhythm to which we voluntarily submit. In saying that Monday morning is unpleasant, we are playing the old game of shifting the blame from ourselves on to external objects that cannot answer back. But Monday is only unpleasant if we have submitted to the rhythm and gone away for the week-end. For all their envy on Friday and Saturday, the pleasantest company in the Residents' Room or College Dining-Room at lunch-time on Monday are those whom necessity or indolence have forced to stay in London. For the more we play, the less we like work.

The worst of work nowadays is what happens to people when they stop working. Modern forms of recreation are not so admirable as to prevent one wondering whether one had not been better employed at one's professional duties. And the more admirable varieties of recreation are exactly those from which it is hardest to dissociate oneself when the week-end is over. But as Montaigne wrote (the translation is Florio's): *A Physician's first entertainment of his patient should be gracious, cheerful and pleasing. An ugly and froward Physician wrought never any good effect.*

It must have been upon a Monday that a certain physician was shown a boy with heart disease which was being over-treated. "Well, of course, we must cut off his digitalis," said the great man to his firm in ponderous tones; and the child leapt from his bed and ran whimpering down the ward, away from this frightful threat.

LATER in this number of the *Gazette* we publish an article which summarises the treatment given by the Hospital's Massage Department to patients recovering from abdominal operations. Post-operative massage has two functions—to maintain or, if need be, restore the patient's muscular power, and to aid in the drainage of the secretions of the respiratory mucous membranes. The masseuse, in making a patient exercise his limbs, however, not only maintains the power of those limbs, but increases the circulation of the blood through them; for muscular activity results in an increased blood supply to the contracting muscle, and the pressure of the contracting muscle pumps venous blood more rapidly back to the heart. It is possible that such temporary bursts of activity provoked by a masseuse interrupt the sedimentation of platelets and erythrocytes in the venous blood stream, and so diminish the chances of formation of a venous thrombus. We know of no reliable statistics bearing upon this possibility. But if, theoretically, a certain mode of treatment may diminish the chance of that major post-operative catastrophe, pulmonary embolism, that line of treatment should be adopted.

Chest infections following abdominal operations are a real source of operatic risk. King[1] found that in a series of over 3,000 abdominal operations performed at the Massachusetts General Hospital, 13 per cent. were followed by chest infections. Such chest infections vary from a simple tracheitis or bronchitis to a serious illness such as "massive collapse," pneumonia, or lung abscess. Tracheitis, bronchitis, and varying degrees of atelectasis are, however, by far the commonest chest complications, and their prophylaxis and treatment are important because not only do they interrupt the convalescence of the patient, but they may also be the starting point of some much more serious, even mortal, illness.

It is agreed that many factors are responsible

for post-operative chest infections. One of the most important is retention of bronchial secretions, especially if these secretions are infected. It is therefore logical prophylaxis to try to prevent the accumulation of bronchial secretions, and logical treatment, if these have accumulated, to encourage their drainage. Post-operative breathing exercises and postural drainage as described in this article help the patient to rid himself of his bronchial secretions.

In arriving at the most suitable method of helping the patient to drain his chest secretions certain facts must be kept in mind. First, post-operative chest infections commonly appear during a fairly fixed period of time after the operation, viz., between 24 and 96 hours after the operation. Secondly, during this period the patient is suffering the maximum of debility and discomfort from his operation, and it is therefore desirable to disturb him as little as possible. Hence, though the patient should have a sufficiency of breathing exercises during this time, his inevitable pain and distress should not be aggravated by any but carefully planned treatment. In the hands of a tactful masseuse the treatment described below, performed sufficiently frequently and at the right time, would be, no doubt, successful with the majority of patients. But it is permissible, we think, to question some of the severer manœuvres, the back-slapping, awkward positions and man-handling, should these be applied to frail or seriously ill patients. A routine procedure has been described elsewhere[2] that is easy to perform, does not overtax the patient even when severely ill, and is efficient in draining the bronchial secretions. Nurses after a little instruction can superintend this treatment, and it therefore has the added advantage that it may be performed as frequently as may be thought fit, since it does not require the presence of a specialist. We describe it below so that it may be compared with the routine post-operative treatment later described.

All pillows are removed from the bed. The patient is then assisted to lie horizontally on one side. He may lie near the edge of the bed with his head hanging over the edge so that his trachea is inclined somewhat downwards. He is then asked to breathe deeply and give a few good coughs, so as to cough up as much sputum as he can. If he has difficulty in starting to cough a few breaths of carbon dioxide may be given to him, but the use of carbon dioxide is otherwise unnecessary and has been shown to be of no therapeutic value.[1] As soon as he has brought up as much sputum as he can without unduly distressing himself, he is turned on his back and allowed to rest for a short period—say ten minutes—so that he is given no chance of becoming exhausted. When he is rested he is turned on his other side and the above performance is repeated. Following this he has a further short interval of complete rest. This simple form of postural drainage may be repeated two or three times a day, for instance, every time the patient has his bed readjusted, and can be superintended by a nurse who has been instructed in it.

We shall be pleased to receive any other views on the most suitable type of manœuvre that may be employed, routinely, to aid drainage of chest secretions during recovery from abdominal operation.

Two Guy's men have been honoured professionally recently. A former Medical Registrar, Dr. R. E. Smith, M.B., M.R.C.P., is to give the Milroy Lectures at the Royal College of Physicians in February next, and the Royal College of Surgeons has awarded the John Tomes Prize for the years 1936-38 to Mr. Arthur Bulleid, L.D.S., M.R.C.S., for his researches into the bacteriology of the mouth.

1. King, D. S. *Surg. Gyn. and Obst.*, 1933, lvi, 43; *J. Am. Med. Assoc.*, 1933, c, 21.
2. Brock, R. C. *Guy's Hosp. Rep.*, lxxxvi, 191.

Loss of Voice

A Clinical Lecture delivered at Guy's Hospital by W. M. Mollison, Esq., C.B.E., M.Ch.

GENTLEMEN,—Voice is primarily due to vibrations of the edges of the vocal cords: a longitudinal section through the larynx shows the true cords to have narrow edges; on phonation these edges approximate, and vibrate in the expiratory stream of air. Anything that prevents this approximation of the true vocal cords causes loss of voice partial or complete; partial loss of voice is generally known as hoarseness, or weakness of the voice.

The space between the vocal cords is the glottis; the glottis is formed as to its anterior two-thirds by the vocal cords, while its posterior one-third is between the vocal processes of the arytenoid cartilages.

The vocal cords fixed anteriorly to the re-entrant angle of the thyroid cartilage are attached posteriorly to the anterior or vocal processes of the arytenoid cartilages, which ride on the upper and

lateral aspect of broad posterior part of the cricoid cartilage.

The arytenoid cartilages are capable of movement in two directions: rotation about a vertical axis and a movement to and from one another; approximation is brought about by the inter-arytenoideus muscle.

Rotation results in abduction or adduction of the vocal processes; the muscles producing this rotation are attached to the muscular process of the arytenoic cartilages, which projects backwards and outwards.

One pulls inwards the muscular process causing the vocal process with its attached cord to swing outwards; this muscle therefore is the abductor of the cord and is the *crico-arytenoideus posticus*.

The other pulls the muscular process outwards and so swings the vocal process inwards; it is the adductor and is called the *crico-arytenoideus lateralis*.

All these muscles are supplied by the inferior or recurrent laryngeal nerve.

Perhaps it may be helpful to tabulate the causes of loss of voice or hoarseness. The three main headings are *affections of the cords*, and with this must be included the posterior part of the glottis which lies between the arytenoid cartilages and their vocal processes; the blind posterior end of the glottis is the posterior commissure. *Affections of the arytenoid cartilages* and their articulation with the cricoid; this joint has a capsule and periarticular tissues. Defects in the *neuro-muscular mechanism* leading to lack of movements in the muscles moving the cords.

A. CORDS.—

- Traumatic.
- Inflammatory.
  - (*a*) Acute.
  - (*b*) Chronic.
    - i. Catarrhal.
    - ii. Tuberculous.
    - iii. Syphilitic.
- Neoplastic.
  - Innocent.
  - Malignant.

B. ARYTENOID FIXATION.—

1. Articular.
   - Rheumatic.
   - Streptococcal.
2. Peri-articular.
   - Syphilis.
   - Neoplastic.
3. Post-paralytic.

C. NEURO-MUSCULAR.—

1. Organic.
   - (*a*) Paralysis of recurrent laryngeal nerve or nerves.
     - i Peripheral.
     - ii Central.
   - (*b*) Paralysis of the external laryngeal nerve which supplies the crico-thyroid muscle.
   - (*c*) Myasthenia gravis.
2. Functional.
   - Lack of adduction.

THE AFFECTIONS OF THE CORD AND THE GLOTTIS

Traumatic.—The vocal cords are so placed that it is unusual for them to get seriously damaged, but hæmorrhage into one cord does occur as a result of blows on the neck. Some years ago a member of the rugby team during a match received a kick in the neck—he was dyspnœic; on recovery from the accident he was aphonic; examination of the larynx on the following day showed hæmorrhage into one cord; slow recovery took place.

A similar accident has been seen from a blow in the neck by the "kick" of a starting handle.

Direct injury of the vocal cords does occasionally occur from the passage of the tube used for intra-tracheal insufflation of anæsthetics, or perhaps from the presence of the tube for some time. It is by no means easy to pass a tube in all cases, and even slight extra pressure may result in damage. Slight degrees of hoarseness are met with after this form of anæsthetic.

In passing, hoarseness due to impaction of foreign bodies between the cords must be mentioned. The history of sudden onset and accompanying symptoms ought to raise suspicion of the diagnosis.

Acute laryngitis is generally a manifestation of acute infections of the upper respiratory tract; it is of interest that epidemics of these infections—often called wrongly "influenza"—appear to affect different parts of the upper respiratory tract. One year the nose and sinuses are most frequent, in another the ears, in another the larynx; this year the larynx was frequently affected. No doubt the streptococcus is the responsible organism, and it is reasonable to give the patients prontosil or M & B 693.

Children are prone to severe laryngitis as a complication of some of the specific fevers, notably measles; again due to secondary infection with the streptococcus hæmolyticus; the larnygitis is in these cases very severe and can produce so

much swelling of the tissues that dyspnœa results in such a degree as to demand tracheotomy.

Other laryngeal infections, especially in children, are those due to the Klebs-Loeffler bacillus and rarely the pneumococcus. In adults both the pneumococcus and streptococcus occasionally cause ulceration on the arytenoids and so hoarseness.

These acute cases are not of much laryngological interest, since the loss of voice only remains till the recovery from the infection.

Of much greater interest are cases of chronic hoarseness or recurrent hoarseness.

A normal nose is all-important to the well-being of the larynx, since the air passing through it on the way to the larynx is filtered, warmed and moistened. Any condition in the nose that prevents this natural preparation of the inspired air tends to damage the vocal cords. Therefore in any case of loss of voice the nose ought to be critically examined.

Nasal obstruction, from a deflected septum, large middle turbinals, polypi or the presence of adenoids may need to be dealt with.

Too spacious nasal passages may be equally important; this condition results from disease—atrophic rhinitis or from previous operations which have been of too drastic a nature. In both cases the lack of normal mucous membrane allows dusty unmoistened air to be inspired and set up irritation or infection in the larynx. In bad cases of "atrophic" laryngitis, crusts of soot-laden dried mucus are seen on the cords and in the trachea, and the patient may cough up these from time to time.

Chronic sinusitis may be responsible from chronic infective laryngitis, thickening of the tissue on the cords at the posterior ends, and in the posterior commissure and redness of the mucous membrane on the arytenoids.

Pachydermia laryngis is another form of chronic laryngitis which leads to much loss of voice.

The posterior parts of the cords and posterior commissure are mainly affected. The thickening is very marked, often more on the side; a marked projection on one side may be seen to fit into a depression on the other, on attempted phonation.

The pathology of this condition is uncertain; in some cases syphilis is responsible.

Recently, time proved this pathology in an unusual way; years ago a man was seen with pachydermia laryngis; syphilis was supected but not proved; now the patient has developed general paralysis of the insane.

Keratosis laryngis is yet another chronic condition of a cord; it shows as a small pale projection on one of the cords mostly on the posterior half, or even on an arytenoid. These patches disappear spontaneously after months or years.

Other chronic inflammatory lesions of the cords are syphilitic and tuberculous.

Syphilitic laryngitis is rare now since the disease is treated so efficiently in the early stages.

Tuberculous laryngitis is invariably secondary to tubercle of the lungs, though proof of this may be difficult; and requires repeated examination of the sputum for tuberculosis and X-ray examination of the chest.

At the early stage of tuberculous laryngitis the lesions may be so slight that diagnosis is only arrived at by a process of elimination. The patient complains of persistent hoarseness and examination shows one area of redness and slight thickening at any part of the vocal cords, posterior commissure, ventricular bands or epiglottis, or even two or three reddened asymmetrical areas.

If examination of the nose, nasopharynx and pharynx fail to reveal any source of infection, tubercle must be suspected. In some cases the lungs show no abnormality, and even repeated sputum examinations fail to show tuberculosis. In two such suspicious cases six months elapsed between the laryngological diagnosis of tubercle and the discovery of phthisis, though the patients were under the close observation of a physician.

To pass to the next group—*Neoplasm*:—

(*a*) Innocent.

(*b*) Malignant.

Taking an intermediate place is the condition known as *Singer's Nodules*. The vibration of the vocal cords is a very delicate mechanism, and if that mechanism is badly used the cords develop a little "interference" in their movements, and are apt to develop swellings in the junction of the anterior and middle-thirds; they are small and are generally symmetrical. They are seen in singers who have not been properly trained, also in people who talk a great deal and have not been trained to speak, or in those who have been trained but have over-strained their voices.

Diagnosis of this condition is simple—rest of the voice and followed by lessons in voice production may lead to cure. If it does not, removal of the nodes is indicated.

The common varieties of innocent growths on the cords need only be mentioned, cysts, fibromata and papillomata. They occur at any age and call for special mention only when there is a question of malignancy. They all give rise to considerable loss of voice.

(*b*) *Malignant* growth of the vocal cords is epithelioma; all others are so rare that they need not be considered here.

Epithelioma may occur at any part of the true cord, though it is commoner on the anterior two-thirds. It is usually slow-growing and does not lead to gland infection, except at a late stage. It presents itself as a warty-looking growth. Early diagnosis is naturally essential for successful treatment. Every male patient (it is a rare disease in women) over 50 who complains of hoarseness and on whose cord a swelling is seen must be under suspicion of harbouring an epithelioma till the contrary is proved.

Many of the lesions mentioned earlier may simulate epithelioma.

Chronic laryngitis (catarrhal), pachydermia laryngis, keratosis laryngis, tuberculous laryngitis and syphilitic laryngitis in certain degrees call for searching differential diagnosis.

The diagnosis of some of these diseases is simple; syphilis by the presence of positive Wassermann reaction, tubercle by the discovery of tubercle bacilli in the sputum, and chronic catarrhal laryngitis by finding some infective focus in the nose or naso-pharynx; but to make a positive diagnosis of epithelioma from fibroma, keratosis and pachydermia may be impossible even after several laryngeal examinations, and the final arbiter is the microscope; this means that a piece of the suspected swelling must be removed for examination.

(*To be continued.*)

The Post-Operative Treatment of Abdominal Conditions by Breathing Exercises & General Strengthening Exercises

By E. M. Stephens, T.M.M.G.

IT is a recognised fact that breathing exercises are of great value to expedite the recovery of a patient who has had an abdominal operation. As a complement to this treatment the use of graduated strengthening exercises for the whole body is very important.

There are, to-day, many different anæsthetics in use. They may be classified under the headings of:—

(*a*) Inhalation anæsthesia, such as nitrous oxide or ether.

(*b*) Spinal anæsthesia.

Both deep inhalation anæsthesia and high spinal anæsthesia result in diminished respiratory excursion of the thorax with consequent stasis and collection of mucus in the lungs. The pain of the abdominal wound and the effect of certain sedatives further diminish respiratory excursion. It is therefore obvious that, as soon as possible, the patient should be taught a method of using the chest to the maximum advantage and also expectoration of mucus must be assisted without causing undue strain on the abdominal wall.

Patients, following abdominal operation, are usually nursed in the "Fowler position," *i.e.*, in the sitting position with the knees semi-flexed over a pillow. This position is, in itself, a difficult one from which to cough up any mucus which may have collected at the base of the lungs, and it follows that any measure which helps in expectoration will be of great value to the patient.

When considering the actual treatment of these conditions, only cases with the usual amount of lung stasis, resulting in varying degrees of expectoration, will be described. Such complications as pneumonia, pleurisy or empyema are treated medically, and only in their later stages come under the care of the Massage Department.

SPECIAL TREATMENT BY BREATHING EXERCISES

It is possible, and not difficult to learn, to breathe more with one part of the thorax than another. Controlled breathing may be mainly upper intercostal or lower intercostal or diaphragmatic in localisation. When first attempting to do localised breathing a certain amount of concentration is necessary. This always proves rather difficult and tiring to a patient the day after the operation if there has been no pre-operative instruction. Ideally, it would be well for all patients to be taught localised breathing before the operation, so that as soon as possible the patient can breathe to the maximum advantage. It may be necessary to use carbon dioxide to obtain deeper respiration.

The advantages of localised breathing, when it is impossible to use the whole thorax to its maximum capacity, are:—

(*a*) Congestion in the lungs is prevented.

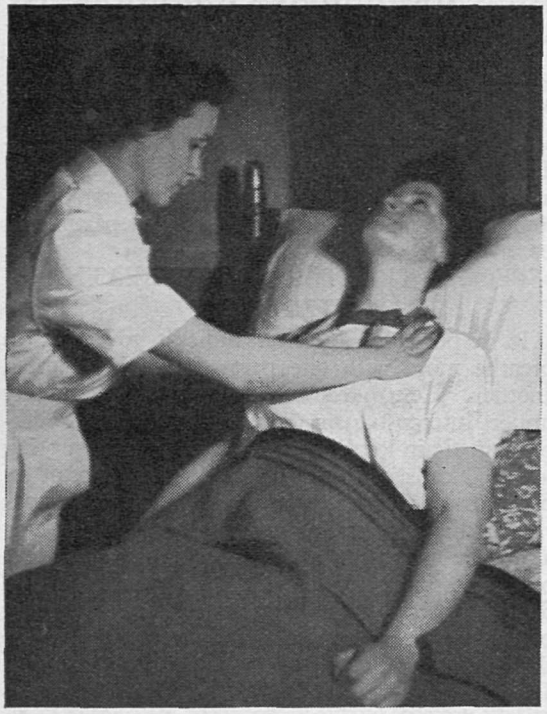
(*b*) The venous return to the heart is maintained, so minimising the danger of thrombosis.

The combination of easy arm movements with the respiratory exercises helps to obtain a greater chest expansion. In order to produce this effect the best exercises are those in which the arms are raised to shoulder level or higher during inspiration and lowered on expiration.

The early use of breathing exercises is especially successful with timid patients, who are often so frightened by the wound which is present that they are unwilling to move or breathe deeply for fear of increasing pain.

The " manipulations " used by the masseuse to help expectoration vary somewhat according to the site of operation, the progress being quicker in a lower than an upper abdominal operation.

On an average, chest vibrations* may be given over the upper costal region on the second day after the operation. These have the effect of loosening the mucus in the lungs and so making expectoration easier for the patient. It will be seen in the accompanying photograph that the Fowler position is maintained for this " manipulation."



As soon as possible the vibrations are extended to the lower costal region, where they are more effective. In the case of a lower abdominal wound this may be done on the second day after the operation, but with an upper abdominal incision not for three or four days.

If the sputum persists after the three or four days, more vigorous treatment is necessary. A most effective method is that of clapping over the back, extending from the lower costal margin to the apices of the lungs.

As will be seen in the photograph, the patient is supported in the sitting position by the operator placing one arm across the patient's chest and with the other giving back-clapping over the regions mentioned above. Naturally the progress is slower with upper abdominal wounds, but the clapping causes no appreciable amount of discomfort to the patient.

TREATMENT FOR MORE EXTENSIVE COLLAPSE OF THE BASE OF THE LUNGS

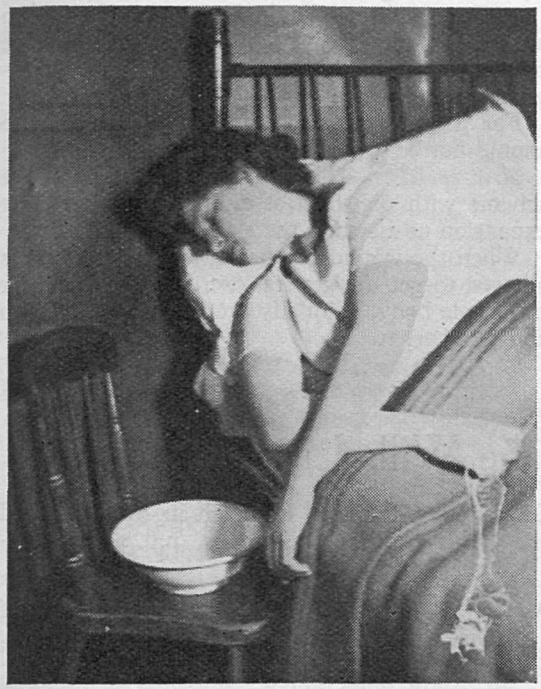
Occasionally after a long abdominal operation extensive collapse of the base of the lungs follows The patient has marked difficulty in breathing and is worried by the constant desire to cough and the inability to do so sufficiently to remove any appreciable amount of sputum.

For this condition breathing exercises and postural drainage are essential. The nursing staff will administer oxygen and, if necessary, give postural drainage.

The patient is placed in a side-lying (semi-lateral) position one one side of the body, with the thorax inclined over a pillow. See the accompanying photograph. Chest vibrations or clapping are

* Vibrations are a series of very fine shakings performed by the masseuse on the chest of the patient.

now given over the chest wall on expiration. These " manipulations " help to loosen the mucus



in the lungs, and the position in which the patient is lying helps with expectoration. This procedure is repeated on the other side. The patient is allowed to rest before this is done.

Should the sputum persist a more effective postural drainage may be given as soon as the wound has healed. The position is illustrated in the accompanying photograph.

Clapping is given over the whole back. This position itself helps much more with the actual drainage of sputum.

SPECIAL TREATMENT BY MASSAGE AND GENERAL EXERCISES

Massage.—After abdominal operations massage should only be necessary for the lower limbs, and then only after the more extensive operations such as a gastrectomy or cholecystectomy. The aim of massage in these cases is to maintain the circulation and so lessen the risk of femoral thrombosis. It is with this object that the knee pillow is removed by the nursing staff on the second day after the operation (the crook position of the knees being maintained by a hot-water bottle at the feet). Massage may begin from the first to the third day after the operation, according to the patient's condition and continue until the patient can do fairly vigorous leg exercises. For less severe operations, such as inguinal herniatomy or appendicectomy, leg exercises are sufficient.

Exercises.—There is a tendency to be too careful in the graduation of abdominal exercises for these conditions, but it will always be found that the patient will try to do far stronger movements in reaching for objects from his locker than the masseuse usually gives.

It is impossible to be dogmatic concerning the extent of exercises as this must vary with the nature of the operation and the age and strength of the patient. Bearing in mind that the progress is much slower after an extensive operation and that the one infallible guide is the patient's own sensation of pain, the following may be taken as a rough guide.

The second day after the operation.—

1. All free foot movements to use the muscles of the lower leg.
2. Contractions of the quadriceps and glutei muscles.

About the fourth day.—

Add to the above :—

1. Knee-bending and stretching, resting the foot on the bed. This to be done with each leg alternately. The number of movements gradually to be increased each day.

2. With the patient in the Fowler position :—

(*a*) Gentle abdominal contractions.

(*b*) Contraction and relaxation of the back muscles.

About the sixth to the eighth day.—

1. With the patient sitting up, trunk dropping into a relaxed position and raising to the erect.

2. With the patient supported against the pillow :—

(*a*) Gentle trunk side-bending.

(*b*) Gentle trunk rotation.

Both exercises should be performed more towards the side of the wound than away from it. They are both given later in the sitting position.

3. Each leg is alternately flexed as before, stretched into the air to an angle of about 35° to 40° with the bed, and then lowered with a straight knee.

About the eighth to the tenth day.—

1. For a lower abdominal operation such as an appendicectomy the patient may sit on the edge of the bed and swing each leg alternately backwards and forwards.

For a more extensive operation this exercise should not be given for more than a fortnight.

Arm exercises.—These may be included in the scheme with the view of either improving chest expansion or assisting the exercises for the back.

When the wound has healed and the patient is allowed to get up, general exercises are given for the whole body, gradually progressing in strength and number.

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"Light Concert" by the Guy's Hospital Musical Society

ANY odd soul with a shilling to spare could, on Wednesday and Thursday, June 7th and 8th, have observed the dentures, tonsils and antics of selected members of the Guy's Musical Society from the salubrious comfort of the hard benches of the Physiological Theatre.

Two houses, crowded to "Residents' Play" capacity but without its *dècor* and splendour, received with obvious appreciation the pot-pourri which this Society chose to offer, and even joined with undignified enthusiasm in the choruses they happened to know.

The Society was fortunate to have the services of Miss Margaret Paterson, who so ably shaped the talent at her disposal to the production of a magnificent evening entertainment, whilst Mr. B. Johnson, the compère, thought to alleviate musical boredom with whispered intimacies.

An opening chorus that exalted all to sing led Miss John Jenkins to divulge the secrets of a bridesmaid's lot; "Happy" Hallam then sang "Shenandoah," and the Chorus, in the meantime, had found "Billy Boy," so they raised the roof with joyful acclamation. Continental music by Merryweather and his Mandoline was followed by an exquisite rendering of familiar Nursery Rhymes by the Chorus.

Stares and Stone, released from their engagement with "The Wicked Warden," delighted the audience with their performance on two pianos, and periodic snatches from a male-voice quartette literally *struck* a medical note and were the few reminders that this was not, indeed, Covent Garden.

"Just as the tide was flowing" brought us to the interval, when the pupils of the Preliminary Training School arrived with lemonade and coffee, so that we were able to join in the choruses of "Snow White" with renewed vigour.

Aspidistras, purloined from some unsuspecting landlady, made the stage setting for a Victorian quartette, "The long and the short of it." Mr. Smith, a promising pupil of Musical Correspondence, Ltd., explained how, in spite of disability and having escaped the *worst* at Out-Patients, he could still give an able demonstration on one piano with four fingers and a jump! A hilarious evening was terminated all too soon by a Musical Switch, the audience being invited to join, and *did*.

The obvious enjoyment shown by the artistes in their performance is in itself a recommendation of the attractions of the Society, and as we have been told further members will be welcomed, we are now off to see the secretaries, Messrs. Baxter and Hart. So come and join us any Thursday at 8 p.m.

TWO CONVERTS.

Correspondence

Guy's Hospital Medical School Inauguration Ceremony, October, 1889

To the Editor of the GAZETTE

SIR,—A packed anatomical theatre of horse-shoe shape with tier above tier of seats, each fronted by a railing and a little shelf for notebooks.

Over four hundred new students, older students, graduates, house officers, and some of the Staff.

Enter from the left to the lecture table a tall aristocratic form with refined features, beautiful blue eyes, chiselled nose, wavy white hair and beard. It is no other than Sir Samuel Wilks, Baronet, author of "The History of Guy's Hospital," "A Textbook of Pathology," Lectures on Diseases of the Nervous System; who first treated epilepsy with bromides.

He congratulates the students on entering the most interesting and altruistic of all professions. He tells them that a certain amount of success is certain if they only work intelligently and perseveringly. That they must always put the patient's welfare first, money last. That he has recently had some letters from doctors in the country telling him of patients who are wishful to pay their bills with "old hay and old cows." This must not discourage them. Bad times and good times alternate in every profession and trade. They have entered a profession and not a trade.

That every new case is a problem often interesting both as a puzzle to be solved and a soul to be soothed. He points out that the main thing is to keep up the scientific attitude. Not to treat symptoms only, but to try to get to the bottom of every case. To remember that their profession

is so infinitely more varied in its intellectual appeal than such a pursuit as banking or counting columns of figures in a business of any kind.

And above all to remember they are or will be concerned in trying with success, small or great, to do good to some fellow creature.

After this address one of the house surgeons spoke with the greatest admiration of the single-minded scientific attitude of Sir Samuel Wilks and the many discoveries he had made. He mentioned as an example not to be followed a mixture he had seen in a doctor's surgery which contained aloes for the bowels, potassium acetate for the kidneys, and digitalis for the heart—a kind of medical Maxim Gun, obviating the necessity of a diagnosis.

I who was present will never forget the words and personality of Sir Samuel, a most impressive figure.

I can remember again eighteen years later, in 1907, hearing Sir Samuel speaking after a lecture on " Words and Things " by Sir Clifford Albutt. Sir Samuel remarked that words tended to change their meaning. He illustrated this by the remark of a grateful female patient who presented him with a beautiful piece of needlework and told him, " It was all made by hand, not manufactured."

There are still a few striking figures in the medical world, but I have never seen a more impressive or picturesque figure or heard a more convincing speaker than Sir Samuel Wilks.

Yours, etc.,

E. C. B. IBOTSON.

La Rocque,
Jersey, C.I.

Experience and the Pharmacopœia

To the Editor of the GAZETTE

SIR,—An old boy on the edge of 70 herein records his experience of the use and value of drugs, obtained during 45 years in practice.

Do not believe the fellow who tells you in a lordly manner that *all* medicine, save opium, is practically useless. It simply means that he has always stuck to official doses, or not observed results. It is true that the Pharmacopœia could and should be reduced to a quarter of its present size, but its contents would then be of immeasureable value.

Vinum Antimoniale.—For 20 years I used it for the bronchitis of folk on the far side of 50 with remarkable results, but you must give 12 drops and increase rapidly as required when you have tested the stomach's reaction to the drug's emetic qualities ; 80 per cent. of your cases will be well in three days. Smaller doses are nearly useless.

For Opium.—Give enough ; 1/12th I.M.H. is childish, 1/6th is as a rule silly ; begin with gr. $\frac{1}{4}$ and increase in half an hour if not successful. If a patient is " on the brink," a $\frac{1}{4}$ I.M.H. will help him comfortably asleep into the unknown.

Vinum Colchici for gout. All modern substitutes for the Hippocratic medicament are " poor blokes," but you must give enough : 15 minims every four hours and increase rapidly if cure is slow. First attacks are well with six to eight doses as a rule, but if attacks are frequent, as the years roll on, you must increase the doses until finally nought is of avail.

Adrenalin for asthma : 5 minims by the skin are useless, or nearly so. I recently asked a consultant addressing a medical society if he did not employ 25 minims. He replied, " You will not get a result with less."

There exists, in my experience, no infallible remedy for insomnia, save opium or morphia. To-day there is but small fear of addiction to the drug. The difficulties of obtaining it are so great.

I freely admit that your patients will need far less attention and your bills will be much smaller, but if we are to be honest doctors we must submit to this. We undertook to do our best when we qualified, and we *must*. The above are the few truly valuable drugs. Those below are futile :—

Bromide (*facile princeps* for epilepsy), useless for other purposes.

Vinum Ipecac. and *Tr. Camph. Co.* are very " poor things."

Finally, of the new preparations, Dettol is wonderful. The Prontosil group is of enormous value. The Ehrlich 606 with its unnumbered modifications is a mighty boon to mankind.

Yours, etc.,

VAUGHAN PENDRED.

Glebe Cottage,
Telford,
Surrey.

"Sir Harley Wimpole"

To the Editor of the GAZETTE

Sir Harley Wimpole, oh ! who are you ?
And who's that suave surgeon James Hoppole ?
On Night Starvation and B.O., too,
Your musings are topic and tophole.
Your qualifications are quite unique,
A masterful medley your name ;
Which of you Guy's guards the secret I seek—
Do be frank with a Curious Dame !

DAM'CURIOUS.

Stockton-on-Tees.

Reviews

Histological Technique for Intracranial Tumours. By DOROTHY S. RUSSELL. Published by the Oxford University Press. Pp. 69. *Price 7s. 6d.*

INTRACRANIAL tumours form an appreciable proportion of all tumours arising in man, and their prognosis depends largely on their histological structure. In some of the gliomata, among the most common of these tumours, the prognosis in expert hands is excellent. Perhaps in no branch of the surgical art is the collaboration between surgeon and pathologist more fruitful for the good of the patient than in that of neurological surgery. Occasionally this collaboration is rendered futile by disregarding some simple detail in technique such as fixing the tissue intended for examination in some unsuitable fluid. Attention to such details is particularly necessary for the proper study of nervous tissues.

Most technical knowledge is available these days in the appropriate handbooks, but the latter are often compilations of all known methods uncritically chosen. This small book by Dr. Russell has the advantage that the methods it contains have passed the acid test of a critical experience in the hands of the team of neurological surgery at the London Hospital. The methods chosen are very clearly presented and their merits and disadvantages pointed out.

This excellent little book should prove very useful to all those engaged in the technique of histological diagnosis in neurological surgery.

S. De N.

Schafer's Experimental Physiology. By W. A. BAIN, Ph.D. Published by Messrs. Longmans, Green & Co. Sixth Edition. Pp. 184. *Price 7s. 6d.*

THIS book is essentially a manual of directions for carrying out most of the fundamental experiments in physiology. It does not include chemical physiology nor the analysis of the respiratory gases.

The directions are given clearly and concisely, and are abundantly amplified by 97 explanatory diagrams. There is a valuable introductory chapter on the conduct and reporting of experiments, while another useful chapter describes the electrical apparatus in common use in physiological work.

Most of the experiments described can be carried out individually, but some can be shown only as class-room demonstrations. No differentiation is made in the text between experiments easy to carry out and those requiring more skill, or costly apparatus, but the author hopes that the teacher will select the experiments for class use.

There is a short appendix giving such useful information as the preparation of the various modifications of Ringer's solution, and the making of varnish for smoked drums. The ground covered is sufficient for the needs of medical students, to whom this excellent book is recommended.

M. L.

Sport

Cricket

GUY'S *v.* HAMPSTEAD

CHASE won the toss on Saturday, May 13th, at Honor Oak Park, and so Guy's were able to make first use of what was decidedly a batsman's wicket.

O'Gorman and Hurst opened the innings and 38 runs were added before Hurst was caught and bowled. Chase joined O'Gorman, and a further 38 runs were added before the former was l.b.w. trying to play a ball on his wicket round to leg.

O'Gorman and Morey carried the score along at a steady rate until O'Gorman was run out after scoring 69, his second half-century for the Hospital this year.

Owing to the clever placing of the Hampstead field, 18 of Morey's first 20 runs were singles, but after his first boundary he gained confidence and played some excellent shots, hitting the ball hard all round the wicket.

Birks played a bright innings for his 19, and if his last shot had carried a little further it would have been six runs instead of a catch on the boundary.

At twenty minutes to five Chase declared with the total at 228 for 7 and Morey undefeated with 70 good runs to his credit.

When Guy's took the field they were without Shea, who unfortunately was unable to play.

The Hampstead opening pair started steadily, but hardly quickly enough under the circumstances, the visitors being set to score 229 runs in two hours. It was not until the score had reached 100 that McClintock took the first wicket. In the same

over he captured the next wicket with a ball that came off the pitch quickly.

By the time the next wicket fell it had become obvious that no definite result would be reached. This situation was clearly reflected in the Guy's fielding, several catches being dropped and the ground fielding becoming very ragged.

At the close of play Hampstead had scored 206 for the loss of five wickets. McClintock bowled well for his two wickets, and was unlucky not to meet with more success, narrowly missing the stumps more than once and having one of the easiest of the day's many dropped catches put on the floor at his expense.

Scores.—Hampstead, 206 for 5 (McClintock, 2 for 40; O'Gorman, 2 for 80; Knight, 1 for 36; Morey, 0 for 20; Hurst, 0 for 19). Guy's.—

Guy's.

G. O'Gorman, run out	69
A. V. Hurst, c. and b. Evans	12
G. H. G. Chase, l.b.w., b. Larsen	19
L. G. Morey, not out	70
P. H. Birks, c. Jordan, b. Leedham-Green	19
J. A. L. Leeming, st. Chapel, b. Leeham-Green	8
D. C. Boyd, bowled Percival	15
Extras	13
Total for 7 wickets	228

S. N. Cole, C. L. T. McClintock and J. H. H. Knight did not bat.

GUY'S *v.* THE OLD MILLHILLIANS

WINNING the toss on Saturday, May 20th, at Honor Oak Park, the Old Millhillians chose to bat. Owing to the sodden state of the ground, Guy's opening bowlers were unable to cause the opening Old Millhillian batsmen much trouble. With the help of some rather indifferent bowling the score mounted steadily until the first wicket fell at 52. The remaining Old Millhillian batsmen were not very impressive, but they managed to accumulate 160 before their captain declared with nine wickets down.

After a rather shaky start, McClintock produced some good balls, taking four wickets for 14 runs apiece.

The Hospital were without O'Gorman, and so Morey opened the innings with Hurst, but the latter did not last long. This brought Morey and Chase together, and they both began to play the bowling well. But at 48 Morey was caught at the wicket. After this no one else was able to stay long enough to give Chase much assistance, although the latter did his best to make the bowling look easy, scoring 82 very good runs, including a 6 and thirteen 4's. After Chase was out the game was virtually over, and Guy's were all out for 124.

Scores.—Old Millhillians, 160 for 9 declared (McClintock, 4 for 56; Morey, 2 for 7; Skea, 2 for 25; Chase, 1 for 25; Hurst, 0 for 9; Knight, 0 for 28).

Guy's.

L. G. Morey, c. Spong, b. Carter	15
A. V. Hurst, c. Jenkins, b. Carter	1
G. H. G. Chase, c. Wright, b. Tucker	82
P. H. Birks, b. Carter	5
D. C. Boyd, run out	3
A. C. C. Hughes, b. Tucker	4
H. A. Thomas, c. Spong, b. Wright	0
S. N. Cole, c. Wright, b. Tucker	7
C. L. T. McClintock, b. Wright	0
J. H. H. Knight, not out	5
R. L. Skea, c. Spong, b. Wright	0
Extras	2
Total	124

Carter, 3 for 46; Tucker, 3 for 20; Wright, 3 for 34.

GUY'S *v.* SOUTH HAMPSTEAD

THE Hospital played their first Sunday game of the season at South Hampstead on May 21st. South Hampstead took first knock, and in the first two overs lost two wickets. But after this the next two batsmen settled down, and it was only when Hart had the misfortune to tread on his wicket that the next wicket fell.

Woodbridge, the next South Hampstead batsman, delighted the spectators by hitting the Hospital bowling into the road three times. The last South Hampstead wicket fell with Woodbridge undefeated for 83 and the total at 189.

Guy's started their innings as badly as South Hampstead, O'Gorman and Chase both being deceived by the flight of the ball and being smartly stumped. But with Leeming and Morey together things began to look brighter, and these two put on 65 runs before Leeming was l.b.w. Morey received good support from Birks and Hughes, who both batted well, and went on to score 74 very useful and attractive runs, including one six.

Five minutes before the close of play Guy's required two runs to win with their last pair at the wicket. But McClintock quickly set our minds at ease by a masterly cut for four. And so Guy's won a very enjoyable game by one wicket.

Scores.—South Hampstead, 189 (McClintock, 3 for 31; Skea, 3 for 61; Knight, 2 for 32; Morey, 1 for 26; O'Gorman, 1 for 33).

Guy's.

J. A. L. Leeming, l.b.w. Malcolm	28
G. O'Gorman, st. Hart, b. Malcolm	4
G. H. G. Chase, st. Hart, b. Malcolm	0
L. G. Morey, b. Malcolm	74
P. H. Birks, c. Woodbridge	30
A. C. C. Hughes, run out	23
H. A. Thomas, s. Hart, b. Malcolm	8
D. N. Fuller, not out	6
R. L. Skea, b. Watkins	1
J. H. H. Knight, c. Watkins, b. Malcolm	1
C. L. T. McClintock, b. Malcolm	10
Extras	13
Total	198

Malcolm, 8 for 86; Watkins, 1 for 41; Woodbridge, 0 for 7; Rose, 0 for 20; Millachip, 0 for 31.

GUY'S *v.* THREE COUNTIES

ON Wednesday, May 24th, Guy's beat the Three Counties Hospital at Arlesey by 8 wickets. The home side batted first and lost a wicket in the first over. By lunch they had scored 66 for the loss of a further wicket.

The interval was unsettling for Robinson, who was bowled by Skea as soon as play was resumed. After that the most determined opposition came from an eighth wicket stand which added 50, to bring the score to 162. The last two batsmen were unable to improve upon this, and Guy's were faced with a score of 162.

Morey and Hurst opened the innings confidently, runs coming quickly on the rather small but very pleasant ground. With 63 runs on the board Hurst was bowled after scoring a nice thirty.

Morey and Chase continued the good work, Chase scoring particularly fast with some well-timed drives. Morey completed his third half-century of the season, soon to be followed by Chase. At 154 the latter was well caught at mid-wicket, having batted well for 59.

The requisite score was reached with Morey 65 not out and Boyd 2 not out. Morey went on to score 71, another very good innings. Cole provided a bright finish to the game with a quick 39, 28 of which were scored in one over.

Scores.—Three Counties, 162 (Skea, 3 for 41; Knight, 3 for 54; McClintock, 2 for 27; Morey, 1 for 11; Curtis, 1 for 16).

Guy's

L. G. Morey, c. and b. Smart	71
A. V. Hurst, b. Hayward	30
G. H. G. Chase, c. Mitchell, b. Smart	59
D. C. Boyd, c. Pogmore, b. Smart	9
S. N. Cole, c. Page, b. Smart	39
H. A. Thomas, not out	4
Extras	9
Total for 5 wickets	221

J. R. Lauder, C. L. T. McClintock, R. C. Curtis, J. H. H. Knight and R. L. Skea did not bat.

Swimming Club

THE team started the season well with a decisive win against St. Thomas's, 7 goals to 1. The handling of the ball was not very polished, but the positioning and passing was such that there is every indication that the Hospital will this year produce a team which will play with its head as well as indulge in the more virile passes of the game.

Team.—K. R. Titford (captain), A. M. McCall, C. Halamandres, J. P. Crawford, J. A. Powell, M. F. Dunn, W. F. Dunn.

The University Sports, 1939

FOR the second year in succession the Hospital won the Rosebery Cup at the University Sports on May 13th; the Cup is awarded to the team which scores the highest number of points.

Our success this year was all the more creditable because one of our best men who would most probably have won two of the events was unable to compete. Our team consisted of 12 men, so that we were not represented in some of the events, but we have a number of keen and useful freshmen up this term, so we are hoping to field a very much stronger and more representative side for the Inter-Hospitals Sports on June 3rd, which we have won for the last four years. If we are to win the Inter-Hospitals' Cup again this year we shall have to field at least 26 men.

G. G. T. Fletcher won the quarter-mile in the very good time of 50.9 secs., and this earned him the Princess Marie Louise Cup for the best track performance of the sports. G. E. H. Enderby was second in the discus and long jump, and R. Merryweather second in the steeplechase. Griffin, Rosenberg and Kynaston also gained places in other events. A. E. J. Etheridge won the three miles quite conclusively; this was the last event of the day, and it put us two points ahead of the London Hospital, who were second with Queen Mary's College third.

Golf

THE President's Prize was played for this year at Hadley Wood Golf Club. The course was new to most of those competing, but nevertheless 80 gross was broken three times.

J. C. Ritchie won the President's Prize for the best scratch score over 36 holes with 83+79=162 gross.

J. W. R. Drury won the Handicap Prize for 36 holes with 71+76=147 net.

Winners.—

President's Prize (36 holes scratch).—J. C. Ritchie, 83+79=162.

36-holes Handicap.—J. W. R. Drury, 71+76=147.

18-holes Handicap.—T. N. Praat, 74.

18-holes Handicap.—D. C. Steven, 73.

We are much indebted to Mr. Bromley, our President, for presenting the prizes for this meeting.

DENTALS *v* MEDICALS

THE "Dentals" beat the "Medicals" for the third year in succession by the convincing margin of 4 matches to 1. The match was played as usual at Beckenham and the course was playing very well after the recent heavy rain.

There were two very close matches which finished all square, but the Dentals managed to win the other three matches fairly comfortably.

Results were as follows :—

Dentals		*Medicals*	
T. N. Praat (7/5)	1	O. van Steytler	0
J. C. Ritchie (6/5)	1	J. G. Mathewson	0
J. W. R. Drury	½	S. A. Marsh	½
S. G. McCallin	½	T. F. E. Brown	½
W. G. Cross (4/3)	1	R. L. Skea	0
Total	4	Total	1

Hospital Information, etc.

Notices

Professor John Beattie, M.Sc., D.Sc., M.D., Conservator of Museum, Director of Research and Professor of Experimental Surgery, Royal College of Surgeons, will give a Lecture on "Hæmorrhage" in the Anatomical Theatre on Tuesday next, June 20th, at 1 p.m.

BRITISH DENTAL ASSOCIATION ANNUAL MEETING, 1939 NEWCASTLE-UPON-TYNE

July 31st to August 4th

A Guy's Alumni Luncheon will be held on Thursday, August 1st, at the University Union, College Road. Guy's men wishing to attend should indicate their intention when returning the questionnaire which will be sent out by the Association prior to the meeting.

GUY'S HOSPITAL MEDICAL SCHOOL

The next Final Fellowship Course will begin on Monday, 28th August, 1939. Guy's men wishing to join the class should apply to the Medical School Office as soon as possible as the number of vacancies is limited.

T. J. EVANS,
Dean.

NORTH-WESTERN UNIVERSITY DENTAL SCHOOL, CHICAGO, U.S.A., SCHOLARSHIP

A Scholarship is offered to a graduate of Guy's Hospital Dental School, on the nomination of the Dental Council, at the North-Western University Dental School, Chicago, as from September 1st, 1939. Details of the Scholarship may be obtained from the Medical School Office.

Applications for nominations should be sent to the Dean, Guy's Hospital Dental School, London Bridge, S.E.1, not later than 8th July, 1939.

T. J. EVANS,
Dean.

UNIVERSITY OF MICHIGAN DENTAL SCHOLARSHIP

A Scholarship is offered by the above University in the form of :—

One year's tuition with the granting of a degree to holders of the B.D.S. degree, or one year's tuition without the awarding of a degree for holders of the L.D.S. diploma.

Further particulars may be obtained on application at the Medical School Office.

Applications for nominations should be sent to the Dean of the Dental School, in the Medical School Office, on or before Saturday, 8th July, at 12 noon.

T. J. EVANS,
Dean.

Applications are invited for the undermentioned appointments, duties to commence on October 1st, 1939. Applications should be lodged in the Superintendent's Office on or before Friday, June 23rd :—

Registrar and Statistician in the Radium Department	1
Assistant Director (female) of the V.D. Department	1
Medical Officer (male) in the V.D. Department, also attached to the Physician in charge of the Skin Department	1
Medical Officer (male) in the V.D. Department, also attached to the Surgeon in charge of the G.U. Department	1
Medical Officer (female) in the V.D. Department	1
Hæmatologist to the Hospital	1
Senior Assistant Bacteriologist	1
Junior Assistant Bacteriologist	1
Additional Assistant Bacteriologist	1
Chief Clinical Assistant and Registrar in the Ear, Nose and Throat Department	1
Chief Clinical Assistant and Registrar in the Ophthalmological Department	1
Chief Clinical Assistant and Registrar in the Radio-therapy Department	1
Chief Clinical Assistant and Registrar to Medical Out-Patients	1
Chief Clinical Assistant and Registrar in the Orthopædic Department	1
Chief Clinical Assistant and Registrar in the Neurological Department	1
Chief Clinical Assistant and Registrar in the Children's Department	1
Chief Clinical Assistant and Registrar, Department of Psychological Medicine	1
Clinical Assistants in the X-Ray Department	2
Instructor of Patients with Defective Speech	1

T. B. JOHNSTON,
Superintendent.

MEDICAL SCHOOL

Applications are invited for the undermentioned appointments, duties to commence on October 1st, 1939. Applications should be sent to the Dean, in the Medical School Office, on or before Friday, June 23rd :—

Medical Registrars	2
Resident Surgical Officers and Registrars	4
Clinical Tutor in charge of the Preliminary Period Class	1
Surgical Clinical Tutor	1
Obstetric Assistant	1
Obstetric Registrar	1
Assistant to the Guy's Hospital Clinical Research Fellow	1
Demonstrator of Anatomy (whole-time)	1
Demonstrator of Anatomy (part-time)	1
Chief Clinical Assistant and Registrar in Dermatological Department	1
Demonstrator of Pathology with charge of the Clinical Laboratory	1
Gull Student in Pathology	1
Demonstrator of Pathology (whole-time)	1
Demonstrator of Pathology (part-time)	1
Griffiths' Demonstrator of Pathology	1
Anderson Demonstrator of Clinical Chemistry	1
Demonstrators of Physiology (part-time)	3
Demonstrators of Chemistry (whole-time)	2
Demonstrator of Chemistry (part-time) and Assistant Lecturer in Dental Metallurgy	1
Demonstrator of Physics (whole-time)	1
Demonstrator of Physics (part-time)	1
Demonstrators of Biology (whole-time)	2
Demonstrator of Biology (part-time)	1

T. J. EVANS,
Dean.

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

L.D.S.

FIRST PROFESSIONAL EXAMINATION.

May, 1939.

Dental Mechanics and Dental Metallurgy.

M. S. Barrada
J. Cranfield
P. A. Dodington
J. R. Fleming
D. A. S. Harvey
J. A. Irwin
R. N. Lewis
D. MacKenzie
G. Morris
J. F. S. Rumble
J. B. Walters
D. A. White

Anatomy and Physiology.

R. F. Camp
D. R. Corless
J. H. Forrester
W. J. M. Hale
J. E. Jones
C. P. Murch
D. A. T. Payne
P. F. Pearson
N. A. Punt
J. L. Watson
W. A. M. Young

Special Anatomy and Physiology.

J. N. Blackwell
F. E. Barlow
A. E. Baxter
O. R. Berry
J. A. Boyd
H. H. Brown
J. D. Buxton
H. L. P. Cullingford
A. A. Dyas
D. Gill
R. M. Gillies
R. B. Illing
M. G. Marks
J. H. Ratcliffe
J. P. J. Rose
N. I. Scott
M. Suskin
H. R. Unstead

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

May, 1939.

Medicine.

*E. L. Moll E. Smith

Forensic Medicine.

*E. L. Moll E. Smith

Midwifery.

E. F. Gleadow.

*Has now completed the examination.

UNIVERSITY OF LONDON.

THIRD (M.B., B.S.) EXAMINATION FOR MEDICAL DEGREES.

May, 1939.

PASS.

Old Regulations.

W. E. W. Bridger
G. B. Collyer
A. P. Dale-Bussell
P. Forgacs
P. A. Gardiner
H. Greenburgh
R. E. Horton
C. W. Kesson
J. R. Kilpatrick
H. A. Lee
N. L. McNeil
I. J. Mathias
D. E. Meredith
J. R. Miles
D. Stafford-Clark
C. J. Stewart
D. Tumrasvin
E. H. Williams

Revised Regulations.

L. Nancekievill
R. G. Robinson
A. J. Walker

SUPPLEMENTARY PASS LIST.

GROUP I.

Under Old Regulations.

J. A. Bowen-Jones
A. R. Darlow
A. J. Drew
W. R. L. Harrison
F. H. Lee
T. M. L. Price
C. H. J. Rey
H. D. Smith
I. MacD. G. Stewart
R. A. R. Topping
H. D. Venning
E. Williams

GROUP II.

Under Old Regulations.

H. R. W. Franklin
J. B. Franklin
A. H. Knight
B. Levin
J. R. E. Richardson

PART I.

Under Revised Regulations.

D. C. Lewin
H. F. Lunn
C. W. Peck
G. F. Smart
H. Wormald

Papers by Guy's Men

Pritchard, G. B. Further observations on the pathology of ankylosis of teeth in man, with special reference to inostosis of bone. *Brit. Dent. J.*, 1939, lxvi, 622.

Hurst, Sir Arthur. The uses and abuses of purgatives. *Clin. J.*, 1939, lxviii, 217.

Douthwaite, A. H. Recent developments in modern chemotherapy. *Practitioner*, 1939, cxlii, 729.

Mitman, M. Diet in health and disease: xxiv. Diet in convalescence. *Ibid.*, 777.

Lane-Roberts, C. A plea for the woman in gynæcology and obstetrics. *Lancet*, 1939, i, 491.

Bennett, T. Izod, and Another. Colloidal aluminium hydroxide in the treatment of peptic ulcer. *Lancet*, 1939, i, 500.

Mollison, W. M., and Another. Some cases of non-malignant ulceration in the external auditory meatus resembling the appearance of early malignant disease. *J. Laryng.*, 1939, liv, 350.

Guy's Hospital Reports.

1939, Vol. lxxxix, No. 1 (January).

Contents.

Hale-White, Sir William, Hopkins, Sir F. Gowland, and Osman, A.A.: George Owen Rees. Pp. 1-8.

Eckhoff, Nils L.: An account of Sir Astley Cooper's first case of amputation at the hip joint, 16th January, 1824. Pp. 9-23.

Lintott, G. A. M., Ogilvie, W. H., and Whillis, J.: Two cases of a congenital malformation of the stomach. Pp. 24-31.

Turner, Philip: A case of multiple diverticula of the jejunum. Pp. 32-46.

Venable, John F., and Jones, J. Gaymer: Total gastrectomy for jejunal ulcer after three perforations. Pp. 47-53.

Regional Ileitis (Crohn's Disease). Pp. 54-80.

Hurst, Sir Arthur: I. Three cases with fistula formation. Pp. 54-65.

—— II. Two cases of regional ileitis diagnosed in retrospect. Pp. 66-69.

Bowen, W. H., and Day, T. D.: III. Post-mortem in a case of regional ileitis nine years after symptomatic recovery following ileo-colostomy. Pp. 70-75.

Edward, Harold, and Hurst, Sir Arthur: IV. A case of regional ileitis treated by ileo-transverse colostomy. Pp. 76.

Gill, W. G.: V. Two cases of acute regional ileitis treated conservatively. Pp. 77-78.

Hurst, Sir Arthur; VI. Occult blood in regional ileitis. P. 79.

—— VII. A negative sign for regional ileitis. Pp. 80-82.

Baker, Charles, and Mann, W. N.: Hodgkin's disease; a study of sixty-five cases. Pp. 83-107.

Boland, E. R., and Lintott, G. A. M.: Results of treatment of rhinorrhœa by injection of protein extracts. Pp. 108-111.

Boveri, R. M.: The errors in the differential blood count. Pp. 112-119.

Changes of Address

H. Bruce Cardew, L.M.S.S.A., Hithe, Wachet, Somerset. *Wachet* 12.

R. Hudson-Evans, M.R.C.S., L.R.C.P., 401, Portland Court, Wallasey, Cheshire.

Births

HUNT.—On June 8th, 1939, to Patricia (née Watts), wife of Robert Graham Hunt, of 6, Park Crescent, Torquay—a son.

MIN SEIN.—On June 2nd, 1939, to Dr. Ma Yin May, wife of Captain Min Sein, I.M.S., Civil Surgeon, Toungoo, Burma—a son.

VINE.—At Wellington, South India, on 10th May, 1939, to Betty, wife of Captain R. S. Vine, R.A.M.C. —a daughter.

Deaths

EVERSHED.—On June 9th, 1939, Dorothy M. Evershed, of 85, Cornwall Gardens, S.W.7 (Theatre Sister, Guy's, 1920-1925), after a very short illness.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII | *1st July* 1939 | *Number* 1329

PASSIM

THE powers that govern the regulation of examinations have decided that a change is necessary in the order of subjects to be taken. In the new Final Conjoint regulations, students who began their clinical study after January, 1938, are not allowed to sit for their Midwifery until all the other subjects are passed, unless it is taken concurrently with the remaining subject or subjects not yet passed.

Because of this, the present sequence of student appointments has had to be reviewed, and certain suggestions have been made by a sub-committee. The alterations suggested will come into force as from July 16th next. The appointment of obstetric dresser has had, of course, to be postponed to the end of the clinical period, and with it that of extern. The appointment in the Children's Department immediately precedes them, so that the student should have a chance to revise his medicine at about the time when he is sitting for the examination. The teaching in the Children's Department will be the better under this new regulation for being more consecutive and organised for each batch of students, who will not be constantly vanishing from the firm to do extern, as heretofore.

The third change is that the so-called free period, when the special departments claim the student's attention (usually nowadays sufficiently occupied in reading for his Finals), should precede the appointment of Senior Dresser. The student, the patient and the special departments themselves should all gain from this, since it will make for more interest and accurate diagnosis in the Front Surgery.

Though these changes arose from the alterations in the Conjoint regulations above-mentioned, they agree with the London M.B. regulations, which do not allow candidates to sit for their Midwifery and Surgery till three years after passing their Second M.B. For a short time there will be some congestion in the special departments, but this is unavoidable. The new sequence of student appointments is as follows :—

1. Preliminary Clinical Period.
2. Surgical Ward Clerk.
3. Medical Ward Clerk (first three months).
4. Junior Dresser.
5. Free Period (*i.e.*, Eyes, V.D.'s, Skins, Fevers, Anæsthetics).
6. Medical Ward Clerk (second three months).
7. Special Appointments (*e.g.*, E.N.T.'s).
8. Senior Dresser.
9. Clerk in the Children's Department.
10. Obstetric Dresser.
11. Extern and Special Appointments (*e.g.*, Nerves).

While we are considering these changes, it seems a pity that the further appointment of Clinical should not be mentioned. It is now two years since the old system was changed, but it is impossible to find within the Hospital one member of the old dispensation who does not congratulate himself that he did Clinical when the appointment consisted of special post-graduate teaching by members of the Staff for whom for the time that was their only duty. The additional title of Assistant House-Physician does nothing to make up for the loss. The teaching was better then, the social side of it was commonly more enjoyable, and it is possible that the abilities of those holding the appointment were more accurately reflected in the subsequent appointment to Assistant House-Surgeon, when the choice was in the hands of two judges only, who were in close touch with their work.

Mr. Ogilvie, in the Epilogue to his " American Journey " recently published in the *Gazette*, observed that English post-graduate teaching was inferior to that in America. It may be that at Guy's, at least, this was not the case until the old system of Clinical was abolished.

ON June 10th, a Tennis Tournament was held at Honor Oak Park under the general organisation of Mrs. Ryffel. The prizes were presented by Miss Johnston, and were given by Lady Nuffield, Lady Bonsor, Miss Johnston, Miss Johnson (formerly Sister Bright Annexe), Mrs. Boland and the Dean.

The winners were Mr. Joyce (tennis secretary) and Miss Embleton, of Charing Cross Hospital, and the tennis was supported by a cricket match between a team of nurses and one of students, of which the latter, perhaps with the help of judicious umpiring, won by the narrow margin of four runs. This match is reported by our cricket correspondent on a later page of this issue, and a photograph appears of the opposing teams.

The proceeds of the tournament may amount to £50.

A NOTICE has appeared in the Colonnade to the effect that Sir Arthur Hurst's last combined round will take place on Tuesday, July 18th, at 2 p.m., and will be restricted to Guy's men. It is not too late to hope that this will not, in fact, be the end of the best bit of medical teaching that Guy's affords, the memory of which must stand out in the minds of so many who have received their education here. Efforts are being made to collect specially interesting cases for the meeting. No doubt the restricted space between Bright and Wilks will be crowded to overflowing with old Guy's men who have a Tuesday afternoon to spare, but it would be a pity if some of the distinguished visiting habitués of Sir Arthur's round, of whom Sir Adolphe Abrahams stands supreme, were to feel that they should not attend it.

THE 7th (Southwark) Battalion the Queen's Royal Regiment attended the annual church parade at Southwark Cathedral on June 11th, 1939. After an address by the Bishop of Southwark the troops marched to Guy's Hospital Quadrangle, where they were inspected by His Worship the Mayor of Southwark. Medals were then awarded by the Commanding Officer, after which the troops gave three cheers for H.M. The King.

The battalion then marched back to its headquarters in Braganza Road, Kennington.

WE see that the Hospital Almoners have, for reasons of economy, been deprived of their decorative uniforms, so inevitably assimilated to the humble sponge-bag. Instead, a " loose green uniform " is worn over their ordinary clothes. However much the wearers themselves may feel that their individuality is better expressed if they take the opportunity that this greater freedom affords, we believe that the majority of the masculine gender are sorry to see the end of their present dress. On another page we print the opinion of one of the almoners themselves.

IN our next issue we start what we hope will prove to be a series of crossword puzzles, of medical flavour and considerable difficulty. A prize of five shillings is offered for the first correct solution to reach the *Gazette* Office.

Solutions should have " Crossword " written on the envelope, which should be addressed to " The Editor, The *Gazette* Office, Guy's Hospital." They must reach here before noon upon the Tuesday preceding publication of the *Gazette*.

THE Guy's Hospital Ladies' Association Garden Fête is to take place this year on Thursday, July 13th, from 2 to 6.30 p.m. It will be opened by The Lord Mayor of London, and the compére will be Mr. Lupino Lane. England's loveliest mannequins will give a Super Fashion and Beachwear Parade and Non-Stop Variety will be performed by the pupils of Miss Italia Conti.

Volunteers are required for the running of stalls and side-shows. Anyone in the Hospital who wishes to help is asked to communicate with the President of the Residents, The College, Guy's Hospital.

Obituary

JEAN RENE PERDRAU, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P.

DR. J. R. PERDRAU died under tragic circumstances at Guy's on May 29th, 1939. He was of a retiring disposition and not often seen at the Hospital, so it is likely few of us realised that on that day a very distinguished Guy's man passed away.

He was educated at the Royal College of Mauritius and entered Guy's Hospital on an Art Scholarship in 1903. He qualified M.R.C.S., L.R.C.P., in 1909, but not having any private means was unable to do house appointments. He entered the service of the Devon County Asylum

and later of the Dorset County Asylum. It was expediency that forced him to take these appointments, as he had no special bias towards nervous diseases—on the contrary, in his youth he was more attracted to surgery—but it was characteristic of him that, having undertaken to do some work and assume responsibility, he did it with all the resources of his powerful intellect and great heart.

He soon became interested in the problems of neuro-pathology, and at the latter hospital a special small laboratory was equipped for him. There he began to accumulate microscopic slides of various disorders of the central nervous system which he collected throughout his life, and which is now recognised as a unique and extremely valuable collection. In 1916 he was appointed Pathologist to the Lambeth Infirmary, which was then a Poor Law Hospital, and in spite of the heavy calls upon his time with routine work, he found opportunities to continue his researches on nervous diseases. During the outbreak of encephalitis lethargica at Sheffield in 1924 he obtained material which led to his discovery of the parallelism which exists between rabbits partially immunised against the virus of herpes—which succumb to an inoculation of that virus—and cases of encephalitis lethargica in man. This led him to postulate that this disease is probably due to the activity of a slightly modified herpes virus in the brain of a partially immune subject. Furthermore he showed that this virus might persist for months in rabbits immunised with the living virus. The persistence of viruses in immune subjects is now generally recognised, and is an observation of profound importance.

His work was of such high order that it attracted the attention of the pathological world and culminated in his appointment to the permanent staff of the Medical Research Council in 1926, where he remained until he died. During that time he published 41 papers all dealing with the subject of neuro-pathology and all recognised as important.

The career of this remarkable man ought to give heart to all those younger ones who through force of circumstances find themselves obliged to follow a course somewhat against their inclinations. It was a triumph of character, patience, keen observation, and thoroughness which led to his success, for surely the path to international fame as a pathologist, via a County Mental Hospital and a Poor Law Infirmary must be a unique one.

In his friendships he showed the same loyal devotion, patience, courtesy and helpfulness which leave a permanent mark on those who were fortunate to be counted amongst his friends.

C. L.

AGNES DOROTHY MAY EVERSHED

AGNES DOROTHY MAY EVERSHED died on June 9th after a very short illness involving an operation.

Miss Evershed entered Guy's Hospital in 1916 and gained her certificate in 1919. After completing her nursing training she qualified for the certificates of the Chartered Society of Massage and Medical Gymnastics.

From 1920 to 1925 Miss Evershed was Theatre Sister at Guy's. It was in this capacity that she became so well known among the staff. She was outstandingly successful in her work. She retired in order to keep house for her father at Shoreham. After his death she came to live in London, and her work continued in a variety of ways. She was a very active member of the Ladies' Association, and at the working parties she was always ready to help other workers with her expert knowledge of cutting out and making garments. She had been a member of the Council of the Guy's Hospital Nurses' League for many years, representing past members. She was a good business woman, and her interest and advice will be sadly missed at the future meetings of the Council. Her untiring energy led her to take part in many charitable works other than Guy's.

Whatever she undertook she did with a sense of responsibility and never spared herself. Miss Evershed was a charming hostess and will be missed by a wide circle of friends. A Memorial Service was held in the Chapel on June 16th.

Loss of Voice

A Clinical Lecture delivered at Guy's Hospital by W. M. Mollison, Esq., C.B.E., M.Ch.

PART II

THE second group of causes of loss of voice comprises those due to *lack of movement* of the cords, which themselves are normal. In the majority of cases one cord only fails to move, but in a few cases both are involved.

Lack of movement may be due to :—

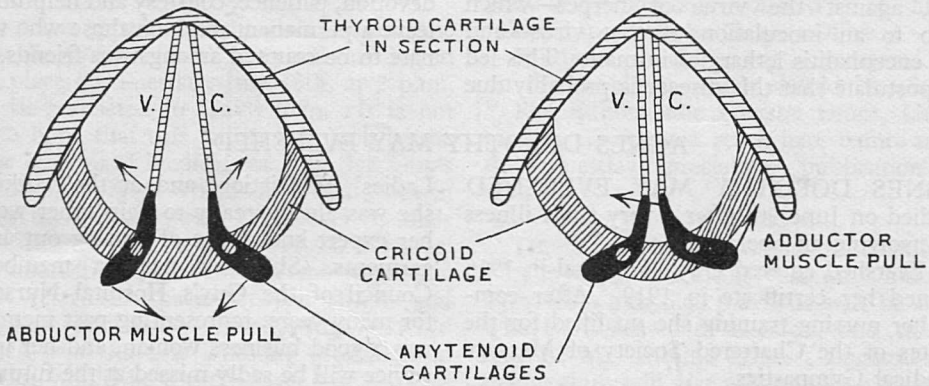
(*a*) Fixation at the joint between the cricoid

cartilage and the arytenoid cartilage riding on it.

(*b*) Lack of muscular action; generally speaking, this is the result of paralysis of the nerves supplying the muscles, *i.e.*, inferior or recurrent laryngeal nerves. One disease the effect of which is to damage the neuro-muscular mechanism—myasthenia gravis—also leads to poor movements of the cords and so to loss of voice.

The rotation of the arytenoid results in approximation and abduction of the vocal processes and so of the vocal cords. Projecting outwards and backwards from the arytenoid is its muscular process, and to this process are attached two muscles vital to this approximation and abduction; both these muscles arise from the cricoid, one from the broad posterior surface and the other from the lateral part of the ring.

It is evident that an outward pull on the muscular process results in an inward movement of the vocal process; in other words the lateral crico-arytenoid muscles approximates or adducts the cords; while the inward pull of the posterior crico-arytenoid muscles swings the vocal processes outwards and so abducts the cords. The diagram illustrates these facts :—



IN INSPIRATION — Vocal Cords — IN PHONATION

Diagram to show the action of the muscles attached to the muscular processes of the arytenoid cartilages

Subsidiary muscles act on the cords, stretching or tightening them or thinning them; the crico-thyroid acts as tensor by pulling the thyroid (and with it the cords) forward on the cricoid; the nerve to this muscle is the external laryngeal from the superior laryngeal. Paralysis of this nerve therefore tends to allow one cord to be less tense. The thyro-arytenoid muscle also exerts pull on the cord in its length, but need not be further considered.

ARYTENOID FIXATION

Fixation of the crico-arytenoid joint. Since this joint has a capsule and joint cavity, it is susceptible to affections of similar joints in other parts of the body. Infective arthritis of *acute rheumatism* may cause fixation with loss of voice; recovery occurs when the attack of acute rheumatism passes.

Scarlet fever causes a similar fixation of the joint, but recovery is rare; fortunately the cord of the unaffected side generally compensates and restores the power of the voice to such an extent that patients do not realise there is any abnormality.

Acute streptococcal infection other than scarlet fever also attacks the joint.

Syphilis in the form of gummatous periarthritis, before early efficient treatment of this disease, was a common cause of fixation of the joint.

Lastly, infiltration of the periarticular tissues by *malignant growth* may fix the joint, *e.g.*, carcinoma of the pyriform fossa. In all these cases examination with the laryngeal mirror reveals some swelling about the posterior aspect of the joint.

PARALYSES

Laryngeal paralysis may be due to paralysis of one or both recurrent laryngeal nerves.

The left vocal cord is far more frequently paralysed since the left recurrent laryngeal nerve has its long course into the thorax, winding round the arch of the aorta and running up into the neck. Pressure on the nerve in any part of this course results in lack of abduction of the left cord.

It is of interest to notice that, though the recurrent laryngeal nerves contain fibres to all the intrinsic laryngeal muscles, those supplying the abductor muscles are always affected in the first place; later both abductor and adductor fibres are paralysed.

The lesions that cause paralysis are mainly *peripheral* :—

a. Aneurysm of the arch of the aorta.
b. Growths of the lung or of the mediastinal gland.
c. Secondary deposits in the thorax from carcinoma mammæ.
d. Pleural thickenings, probably tuberculous.
e. Growth of the œsophagus, upper end.
f. Pressure from enlarged thyroid gland.
g. Damage after operations on the thyroid.
i. Trauma : wounds in the neck and blows on the neck (the paralysis being recoverable in these cases).

Since the right nerve only has a cervical course only the last four causes apply.

Both nerves may be affected ; by malignant disease of the thyroid gland, by damage during operations on the thyroid, and by malignant diseases of the upper part of the œsophagus.

Central causes are tabes and certain cerebral lesions, hydrocephalus.

Actually traumatic double abductor paralysis does not necessarily cause loss of voice, because the adductor muscles are still able to function. but, owing to inability to abduct the cords, dyspnœa results ; later, when all muscles become involved, the cords take up a position half-way between abduction and adduction and aphonia is of high degree.

The nerve fibres that supply the cords may be damaged before they separate from the vagus trunk ; these paralyses may be called " central." The central origin of the vagus is in the medulla, and the fibres to the laryngeal muscles arise from the lower part of the nucleus ambiguus. The nerve then passes from the medulla to exit from the skull through the jugular foramen together with the ninth and eleventh cranial nerves. It follows that " central " paralysis of the cord can be caused by lesions of :—

1. The nucleus ambiguus.
2. In the posterior fossa of the skull.
3. In the jugular foramen.
4. Outside the skull.

Since the ninth, tenth and eleventh nerves arise from the nucleus ambiguus and run close together, it follows that all will be involved by any damage that may occur, and the result is a palato-pharyngo-laryngeal paralysis.

The common causes are : hæmorrhage into or thrombosis of the vessels to the medulla ; pachymeningitis of the posterior fossa ; tumours of the cerebello-pontine angle ; glands at the base of the skull.

In myasthenia gravis the neuro-muscular mechanism of the larynx may be affected early, and weakness of the voice results ; as is common in this disease, exhaustion is the prominent symptom, so that the loss of voice is worst at the end of the day.

Inability to adduct the cords is a common affection and leads to real aphonia ; it occurs generally in women, especially young women, and is called " functional aphonia."

On examination with the laryngeal mirror the cords appear normal in form and colour, but attempts at phonation fail to cause approximation of the cords while abduction with inspiration is normal.

Persuasion and explanation cure the condition. There is almost always a psychological cause in the background, but protracted or relapsing functional aphonia raises the suspicion of pulmonary tubercle, which must be excluded.

(*Conclusion.*)

An Unusual Fracture and Repair of a Maxillary Central Incisor

A Paper read before the Dental Society by C. H. Blockley, Esq., L.D.S., R.C.S. (Eng.)

MR. CHAIRMAN and GENTLEMEN,—The case which I am about to describe is an unusual one and concerns a boy, aged 12 years 3 months, who received a blow in the mouth with a hockey stick, resulting in a fracture of the first upper right incisor, separating practically the whole of the crown from the root.

The boy was brought up to the Children's Department on the 31st August, the accident having occurred on the afternoon of the 30th August. On clinical examination, the crown was found to be missing, the fracture running backwards from a line drawn horizontally across the anterior surface of the tooth about one-eighth of an inch from the gum margin, to the amelo-cemental junction on the palatal side.

The pulp was found to be hanging from the root, about one-sixteenth of an inch being visible, still intact inside its membrane and was still vital. The patient said that he had felt no pain either at the time of the accident or afterwards.

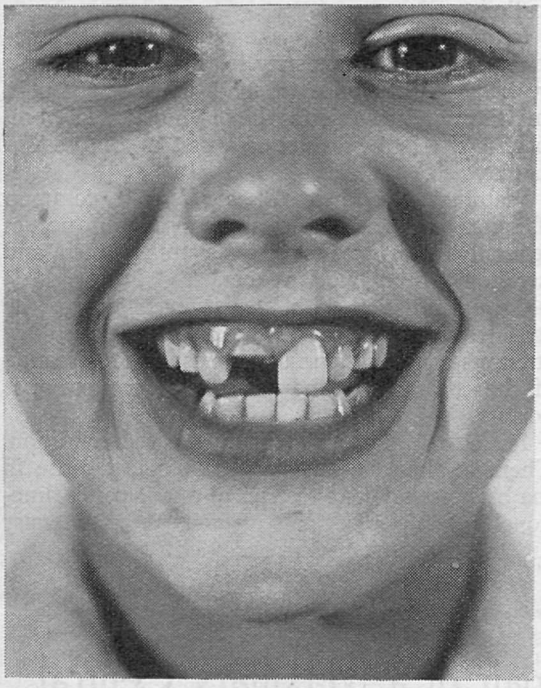
The crown was produced from the mother's purse and was found to be completely intact, and contained the whole of the pulp chamber.

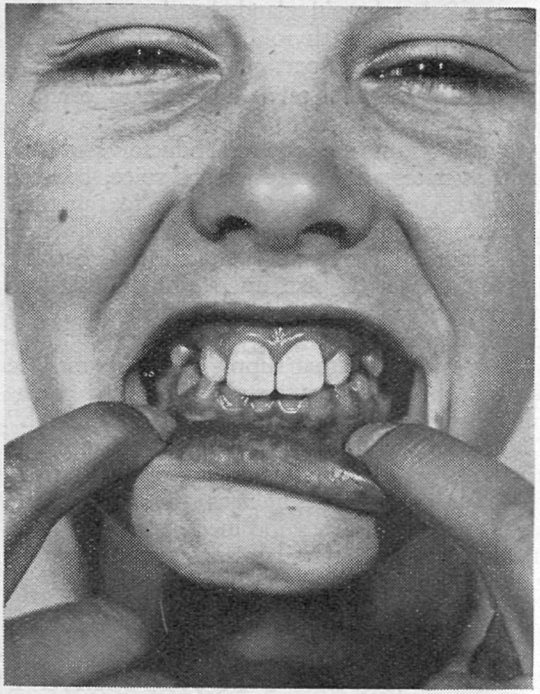
The patient was then X-rayed to ascertain whether there had been any fracture of the root. The X-ray showed no fracture and the apex was closed.

It was then decided that, as the fractured crown, when replaced on its root, presented such a good æsthetic result that it would be worth while attempting to utilise the patient's own tooth for the restoration.

A sub-mucous injection with novocain was given, but anæsthesia was not sufficient; pressure anæsthesia with cocaine was then employed and the pulp removed.

It was impossible to apply a rubber dam owing to the nature of the fracture.





Adrenalin on paper points was applied to procure rapid clotting at the apex, and consequently no staining. A tricresol dressing was then inserted and the canal sealed with gutta-percha, a large piece of gutta-percha being employed, to keep the gum back from the surface of the fracture on the palatal side.

The patient was seen two days later and the dressing was removed, the canal was well reamed and the apical third was then filled with copper-amalgam, and a dressing of hydrogen peroxide inserted, as the small portion of the enamel visible appeared to be slightly darker than that of the neighbouring central incisor.

The crown was then taken from a bottle of water in which it had been kept, and the pulp chamber was enlarged to form an oblong undercut cavity about twice as deep as the original pulp chamber. A length of platinoid post was fitted into the root canal, being cut off so that the end protruded into the crown when the latter was replaced.

The post was serrated throughout its whole length, special attention being paid to the serrations at the end which was to be fixed into the crown.

The root canal and crown were then filled with Kryptex, the post inserted into position, and the crown replaced in its original anatomical position.

It was then held in position for about five minutes, excess of Kryptex being then removed and the line of union stoned smooth.

The normal lip line covers the line of fracture so that the tooth appears normal.

It is slightly longer than its neighbour, but, according to the mother, it always had been, and it was due to this that she thought it had been broken.

He has now resumed normal function with the tooth, and it has so far stood up to sticky toffee and two further blows.

The photographs reproduced were taken during his visits to show the original condition and the finished appearance.

The Subjective Effects of Tobacco Smoking

AT a recent Clinical Lecture those present were invited to answer a simple questionnaire in which they were asked to describe any symptoms they attributed to their tobacco smoking. The writer wishes to thank Dr. Boland for permission to study the results so obtained and to publish the analysis of them given below. It must be stated that such a survey is in several respects incomplete. The results are purely subjective; the same symptom is described in various terms by different persons—symptoms which to some appeared insignificant and so were not recorded, were sometimes stressed by others. The analysis is presented in the hope that, in spite of its lack of scientific exactness, it will be of interest to its readers.

A total number of 123 students attended the lecture, only 12 being non-smokers. Of the smokers 39 described the occurrence of symptoms with their usual amount of tobacco, 48 noticed symptoms only when they smoked more than usual. Thus 24 complained of no ill-effects caused by smoking. In the analysis which follows all the symptoms are classified together, whether occurring with the normal amount or with excess of tobacco consumed; it was found that the symptoms of these two groups were similar, any difference being one of degree rather than of type.

The average age of the students concerned was between 22 and 23 years. They had commenced smoking mostly at 17, though 39 had started before this age, and 19 before the (lawful) age of 16. There are records of trial attempts at such tender ages as 10, 9, 7, 6 and even 5. Only two students had commenced after the age of 22. There was little difference in the number smoking cigarettes alone (50) and those smoking both cigarettes and a pipe (52). The pipe alone was not so popular (7). The average amount of tobacco consumed was of the order of 10-15 cigarettes a day, with or without one and a quarter ounces of pipe tobacco in the week. 35 cigarettes a day was the largest number of cigarettes smoked; 5 ounces of tobacco a week was the maximum amount consumed by a pipe-smoker.

Symptoms.—Referrable to the various systems of the body. (The bracketed numbers refer in each case to the number of students concerned.)

A. ALIMENTARY SYSTEM

1. *Mouth and throat.*—Glossitis occurred with both cigarettes and a pipe (18). Salivation was occasionally reduced (2), but generally increased (9). The various forms of sore throat (14) included laryngitis, pharyngitis and catarrh.

2. *Gastro-intestinal tract.*—Nausea was caused when tobacco was smoked on an empty stomach (10), and often accompanied by anorexia (3). Various epigastric sensations were described: pain (5), discomfort (2) and "gastritis" (1). There was a definite connection between smoking and the action of the gastro-colic refiex—which was sometimes noticed to be facilitated (7). Diarrhœa (2) and vomiting (3) were caused in sensitive individuals.

B. RESPIRATORY SYSTEM

Several members of the Hospital rugby and athletic teams were included in the number of those who stated that smoking interfered with their training and reduced their efficiency (7). Only one student—not so distinguished—affirmed that his smoking had no effect on his training. Slight bronchitis was sometimes caused (12), the cough being especially noticeable in the morning; in a few cases a pre-existing cough was aggravated by smoking (3). Tight feelings in the chest were also described (3).

C. CARDIOVASCULAR SYSTEM

All of the symptoms in this group were referrable to the heart, and most commonly took the form of extra-systoles (8), which were doubtless recognised by the "dropped beat" of the compensatory pause. Simple tachycardia (3) and "palpitations" (3) also occurred. Precordial pain was also described (2).

D. NERVOUS SYSTEM

Evidence of sympathetic hyperactivity was given by the occasional occurrence of sweating (3), in one case so marked as to cause disintegration of the cigarette held in the fingers. Tremors of the limbs were described (3). Dizziness (12) and headache (8) occurred relatively frequently—the latter usually being associated with a "stuffy" indoor atmosphere. Only one student recorded mistiness of vision—a symptom recalling the feared but rare complication of heavy smoking—tobacco amblyopia. Remarks on the general effects of smoking were vague, in general referring to the pleasure and satisfaction so derived. A definite sedative effect was recorded (3), as were also those of depression (1) and irritability (1). One beneficial effect described was that a pipe keeps the smoker awake in lectures.

GENERAL OBSERVATIONS

A study of these symptoms as recorded above reveals that the effects of tobacco smoking are very variable. There is a marked difference in the amount which can be tolerated. One student was able to smoke five ounces of pipe tobacco weekly with no troublesome effects, whereas another was incapacitated by a few cigarettes in the day. Some students were unable to smoke a pipe, others found that symptoms were more marked with cigarettes. This individual idiosyncrasy extended even so far as different brands of tobacco, in some cases a particular brand causing marked symptoms, whereas other brands had no harmful effect. Thus every smoker has a " tolerance threshold " beyond which symptoms are caused, but below which the effects of his smoking are entirely pleasant. A smoker normally tends to limit his smoking so that no symptoms are caused ; his " tolerance threshold " is only passed because of the force of habit or through the stress of circumstances. The results of this questionnaire are in agreement with the findings of experimental and clinical research, which show that the effects of tobacco-smoking are definite but transient. Unless the practice is carried to excess, it is unlikely they play a significant part in the ætiology of organic disease.

H. F. L.

Correspondence

Post-Operative Massage Treatment

To the Editor of the GAZETTE

SIR,—With reference to the routine post-operative massage treatment described by the writer of " Passim," I should like to give some fundamental principles underlying all treatment for patients undergoing major operations :—

1. To facilitate understanding and ease for subsequent work, every patient should be given two or three lessons before the operation on how to breathe, using the diaphragm and chest. Over many years it has struck me very forcibly both in children and adults how few normal people are capable of deep breathing, *i.e.*, using the diaphragm first and then the chest ; they either do abdominal or upper-chest breathing, and seldom a complete rhythmic movement of all.

2. Carefully given mobility of the thoracic spine and ribs is necessary to obtain an easy complete respiration.

3. Instruction in relaxation is vital, to add to the comfort of nursing and the easy performance of remedial work, and best taught before the patient becomes seriously ill.

4. The ability to contract and relax the muscles of the whole body, especially those of the abdominal wall, is essential to enable simple active exercises to be given without fatigue.

5. Some of the " severer manœuvres " mentioned in " Passim " should not be employed for severely ill patients, and in the hands of the experienced are not in the scheme of work.

6. To obtain drainage of the chest secretions, gravity positions will help, but should only be introduced gradually. Raising the end of the bed during the treatment and gently turning the upper part of the trunk is often sufficient to obtain results.

7. In cases where there is a high abdominal incision it is important that the breathing be directed to depth (hence the importance of pre-operative training), and that the trunk, should it be found necessary to turn it, should be turned as a whole to avoid a twist of the upper part.

In 1924 I visited the General Hospital in Lund, South Sweden. There it was the general routine for every case of abdominal operation to receive post-operative remedial treatment. The work was carried out by pupils of the Major Thulm School. The result was that over a period of some years there had been no major post-operative catastrophies.

It is with great interest that I have read both " Passim " and the article by Miss Stephens, and I am waiting for the day when this most important part of the " get fit " work will be introduced into the routine treatment for rich and poor alike.

Yours, etc.,

HESTER S. ANGOVE.

54, Cumberland Mansions,
Seymour Place, W.1.

To the Editor of the GAZETTE

SIR,—With reference to the statements in " Passim " on the question of Physical Treatment by Breathing Exercises for Post-operative Cases, we would like to query some of the remarks.

The article refers to the treatment by such terms as " back-slapping " and " man-handling," the former being referred to as a " severe manœuvre."

Back-clapping is a manipulation whose primary advantage is that it can be varied to suit each

patient. For the " frail and seriously ill " patient it would obviously be given very gently, but for such a condition as chronic bronchitis it would be more vigorous. Even the inexperienced student would give no more than gentle vibrations in conjunction with deep breathing to a patient " suffering the maximum of debility and discomfort from his operation."

With reference to the " awkward positions," we have found from experience that they cause no inconvenience to the patient, each being used with due regard for the patient's health and strength.

We feel that the writer may have witnessed these " back-slappings " performed on such patients as those suffering with chronic bronchitis or bronchiectasis—the manipulations, even with these cases, being less severe in fact than in appearance.

Yours, etc.,

E. M. STEPHENS.
(*pp. The Teaching Staff.*)

Guy's Hospital,
S.E.1.

" The Wearing of the Green "

To the Editor of the GAZETTE

SIR,—The heart of St. Patrick must surely rejoice
And his halo must glisten with pride,
And in accents of joy he will lift up his voice
To confound all who scoff and deride.
For the wearing of green is an honour to him
(At least, Erin considers it so!)
And now no more " Spongebags " will answer your whim,
In *his* colours we trip to and fro.
Then three cheers for St. Patrick, our patron henceforth!
May he guard the ex-" Spongebags " of Guy's,
And whether we trip to the east, south or north,
Or the west, may he grant we be wise!
For the wearing of green should remind us of him,
And we ought to be grateful and gay
That they didn't supply us with something more grim,
When taking us out of our grey!

Yours, etc.,

EX-" SPONGEBAG."

Sir Harley Wimpole replies to " Dam'Curious "

To the Editor of the GAZETTE

If, Curious Dame, to your axilla
My words have brought the odour of vanilla
And once more kindled in your fickle Beau
Love's dying embers (outed by B.O.);
Or if, perchance, the temper of your spouse
Your aspect lackadaisical did rouse,
And any hints of mine on Nutrication
Helped you to banish Night Starvation,
My heart is glad. But, when you ask
That with *you* I'll be Frank! I fear the task
Unwise. Partic-u-larly
Since you know quite well my Christian name is Harley.
Besides, the jurisdiction of the G.M.C.
Reaches even Stockton-on-the-Tee!

H. W.

(*Note.—The above lines were written on what appears to be an empty packet of some sort of patent food which is said to cure constipation. We understand this is the subject of Sir Harley Wimpole's researches at the moment.—Editor.*)

Reviews

Infections of the Hand. By LIONEL R. FIFIELD. Second Edition by PATRICK CLARKSON. Published by Messrs. H. K. Lewis & Co., Ltd., London, 1939. Pp. 162, 57 illustrations. *Price* 9*s.*

MAN has risen from the beasts by the use of his hand, and any loss of function in this specialised human tool deprives him of his place among his fellows. The treatment of injuries and infections of the hand is therefore the most important single subject in medicine, yet it is one on which information is not readily available. Kanavel's classical work is a scientific monograph rather than a textbook, and the information in standard works on surgery is too condensed to be of practical value. The appearance of a fresh edition of Fifield's " Infections of the Hand " will therefore be welcomed by students and practitioners alike. It is a book that cannot be omitted from any personal library, however small.

The second edition is more than a revision. New methods of treatment have appeared, notably the sulphonamides and short-wave therapy; experience has modified to some extent the incisions and approaches recommended twelve years ago, and a more accurate knowledge of the best and worst that may be expected from treatment is now available. This information Mr. Clarkson has

incorporated, partly in a reconstruction on the original framework, partly in chapters that are entirely new.

The author brings to his task an unusually wide experience in the surgery of trauma and minor infections, and is fortunate in being able to command the services of a skilled draughtsman for the line drawings, which are new and admirable. His writing is clear and incisive, and the chapters which he has added himself, notably that on the general principles of treatment, are among the best in the book. The publishers also deserve praise for the manner of its production. The secret of how considerably more information than is to be found in the original edition has been put into a book of the same size and appearance with twenty-four fewer pages, lies in the type, which is more striking than in the former, but allows three more words to the line, and six more lines to the page.

It is refreshing and unusual to be able to review a book in which there is nothing redundant and nothing omitted, and which can be recommended without reserve to all classes of readers.

W. H. O.

Sport

Cricket

GUY'S *v.* DULWICH

GUY'S won the toss on Wednesday, May 31st, at Dulwich, and were able to make first use of a wicket which looked full of runs. Hurst and Leeming opened the innings, and at 13 Hurst was well caught in the gully. Two runs later Chase was caught at mid-on, but the next wicket did not fall until 117. This recovery was mainly due to some hard hitting by Leeming, who, after an early chance in the slips, gave the Dulwich bowlers considerable trouble.

At the other end, Morey batted well whenever he was called upon to face the bowling. After scoring 86, including 13 fours and 2 sixes, Leeming was caught on the boundary. A few overs later Morey was caught in a similar way.

Of the remaining Hospital batsmen Crabtree was the top scorer with 19, and Guy's were all out for a total of 176.

When play was resumed after tea Dulwich were left with two and a quarter hours' batting, but they started badly, Skea taking two good wickets in his first few overs. After that the Dulwich batsmen settled down, but contented themselves with only scoring off the loose balls.

Emus batted well for Dulwich until he got his legs in the way of a straight ball from McClintock. When the latter had taken the next wicket the home side began to realise that they were now behind the clock. The next four batsmen tried in vain to make up for lost time, but they could only bring the Dulwich score up to 164 for 8 by the close of play.

Scores.—Dulwich, 164 for 8 (Skea, 4 for 61; Knight, 2 for 35; McClintock, 2 for 42; Morey, 0 for 20).

Guy's

J. A. L. Leeming, c. Otway, b. Bartlett	86
A. V. Hurst, c. Bartlett, b. Skinner	4
G. H. G. Chase, c. Clayton, b. Skinner	1
L. G. Morey, c. Pettifer, b. Clayton	36
S. N. Cole, b. Bartlett	2
H. A. Thomas, c. Clayton, b. Curran	6
D. N. Fuller, c. Hemmings, b. Bartlett	1
J. W. A. Crabtree, b. Skinner	19
C. L. T. McClintock, b. Bartlett	8
J. H. H. Knight, not out	10
R. L. Skea, b. Curran	0
Extras	3
Total	176

Curran, 2 for 55; Skinner, 3 for 33; Bartlett, 4 for 41; Clayton, 1 for 12; Palfrey, 0 for 32.

GUY'S *v.* NORBURY

ON Saturday, June 3rd, Guy's beat Norbury by 7 wickets at Honor Oak Park. Guy's scored 278 for 3 wickets declared, O'Gorman (54), Chase (68) and Morey (not out, 89) all batting well.

When Norbury batted, Morey followed up his success with the bat by taking four wickets for 27. Norbury were all out for 137.

Scores.—Norbury, 137 (Morey, 4 for 27; Donner, 3 for 34; O'Gorman, 2 for 25; Skea, 1 for 48).

Guy's

G. O'Gorman, c. Mullis, b. Gardner	54
A. V. Hurst, c. Summers, b. Jones	30
G. H. G. Chase, b. Adamsthwaite	68
L. G. Morey, not out	89
A. C. C. Hughes, not out	24
Extras	13
Total for 3 declared	278

GUY'S *v.* BUCCANEERS

GUY'S beat the Buccaneers on Sunday, June 4th, at Honor Oak Park by 122 runs. Morey and Chase again batted very well, the latter scoring the first century of the season.

Although the other batsmen did not make much of a showing, a second wicket partnership of 190 by Chase and Morey enabled the Hospital to reach the very respectable total of 252.

Skea and Morey bowled unchanged throughout the Buccaneers' innings; the former bowled especially well and took seven wickets for 70.

Scores.—Buccaneers, 130 (Skea, 7 for 70; Morey, 3 for 51).

Guy's

J. A. L. Leeming, b. Croker	5
L. G. Morey, l.b.w. Croker	80
G. H. G. Chase, b. McNinty	112
D. N. Fuller, c. and b. Head	20
D. C. Boyd, not out	5
J. van A. Steytler, c. and b. Croker	1
H. A. Thomas, b. Croker	0
S. N. Cole, c. Moore, b. Head	4
R. L. Skea, b. Croker	3
T. Wooldridge, b. Croker	3
D. Mayman, b. Croker	0
Extras	19
Total	252

INTER-HOSPITALS' CUP MATCH
GUY'S *v.* WESTMINSTER

ON Wednesday, June 7th, at Honor Oak Park, Guy's beat the Westminster Hospital in the second round of the Inter-Hospitals' Cup matches by 10 wickets. Westminster batted first and commenced their innings at 11.30; by 12.30 they were all out for 47. Skea bowled well and took six wickets for 26 runs.

O'Gorman, who, as usual, hit the ball hard, and Hurst knocked off the necessary runs in four overs. Play continued until lunch-time, Guy's scoring 75 for 2 wickets. O'Gorman scored 45 not out, including 8 fours and 1 six.

Scores.—Westminster Hospital, 47. (Skea, 6 for 26; Knight, 4 for 19).

Guy's

G. O'Gorman, not out	45
A. V. Hurst, b. Drew	11
G. H. G. Chase, b. Roderick	8
L. G. Morey, not out	5
Extras	6
Total for 2 wickets	75

P. H. Birks, J. A. L. Leeming, D. C. Boyd, H. A. Thomas, C. L. T. McClintock, J. H. H. Knight and R. L. Skea did not bat.

NURSES *v.* STUDENTS

DURING the Tennis Tournament at Honor Oak Park on Saturday, June 10th, the first Nurses *v.* Students game was played. The two elderly gentlemen who regularly watch the cricket at Honor Oak Park must have been somewhat taken aback to find the field graced with eleven pairs of tennis shorts and their wearers.

The Students batted first and scored 120. Four batsmen were run out by accurate throwing in to the wicket and two broke their bats and were unable to continue their innings.

The Nurses scored 116, with some determined hitting. The game was admirably umpired with the utmost discretion throughout by Messrs. Wood and Henderson.

After the game a miniature bat, very kindly given by Mrs. Ryffel, was presented to the winning team. It is hoped that this bat will be contested for annually.

Students

J. H. H. Knight	9
C. L. T. McClintock, c. Little, b. Considine	3
M. Price	12
S. N. Cole, b. Considine	16
G. H. G. Chase, run out	0
L. G. Morey, run out	1
J. Bromley, c. Little, b. Knight	5
T. H. Eustace, run out	21
R. Williams, hit wicket, b. Knight	29
J. Dunn, not out	18
A. C. C. Hughes, run out	1
Extras	5
Total	120

Nurses

B. Considine, b. Williams	20
J. Chase, b. Hughes	3
M. Marriott, b. Dunn	1
E. M. Green, c. Bromley, b. Eustace	18
H. Little, c. Price, b. Morey	10
R. Wadham, c. Price, b. Cole	8
D. Buchan, c. Chase, b. Cole	2
P. Wilson, not out	14
S. Phelps, c. Morey, b. Hughes	6
K. Knight, b. Chase	17
M. Mariott, c. Hughes, b. Eustace	5
Extras	10
Total	116

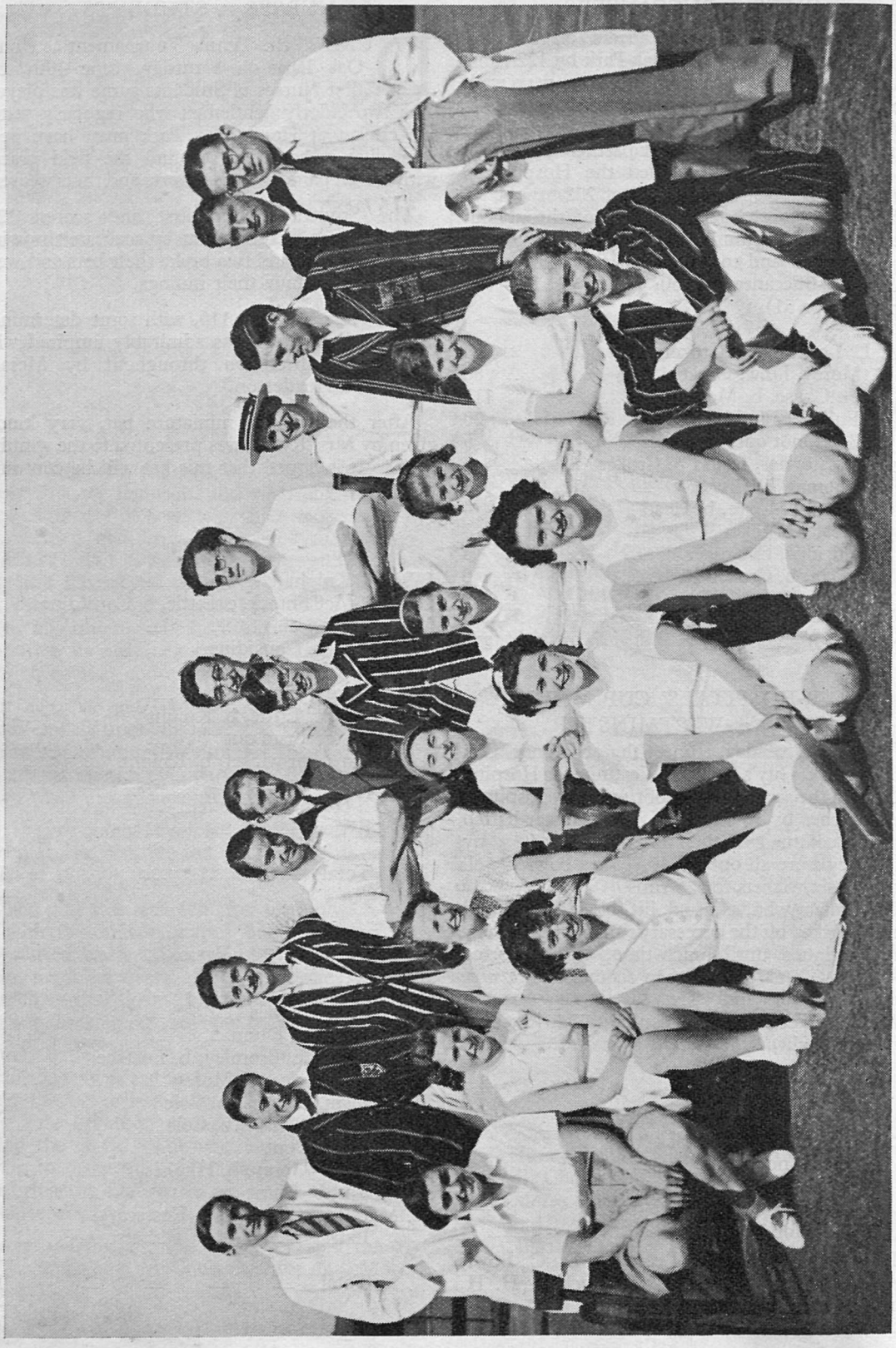


Photo by T. H. Eustace

NURSES v. STUDENTS

GUY'S *v.* CATERHAM STROLLERS

CATERHAM Strollers paid their first visit to Honor Oak Park on Sunday, June 11th. Guy's batted first and both the opening batsmen were out in rather unlucky ways. A rising ball struck O'Gorman on the body and then rolled on to the wicket; Thomas slipped on to his wicket when pulling a short ball.

After this, Morey batted well until he played late to a good ball from Winston. McClintock provided a bright finish to the innings by scoring a quick 27.

With over two hours left for batting and faced with a total of 154 the Caterham Strollers started slowly. By close of play they had scored only 134 for 9 against a rather uninspired Hospital attack.

Scores.—Caterham Strollers, 134 for 9 (McClintock, 3 for 33; Vellacott, 2 for 23; O'Gorman, 2 for 40; Knight, 1 for 17; Morey, 1 for 20).

Guy's

G. O'Gorman, b. Winston	5
H. A. Thomas hit wicket, b. Feldwick	6
L. G. Morey, b. Winston	36
G. H. G. Chase, c. and b. Feldwick	3
P. H. Birks, c. Winston, b. Feldwick	11
A. C. C. Hughes, c. and b. Feldwick	29
G. W. Garland, c. Walker, b. Stanley	15
W. N. Vellacott, c. Hall, b. Stanley	8
J. R. Lauder, c. Pinfield, b. Winston	7
C. L. T. McClintock, c. Pinfield, b. Feldwick	27
J. H. H. Knight, not out	1
Extras	6
Total	154

GUY'S *v.* WESTCLIFF

ON Saturday, June 17th, Guy's lost to Westcliff at Honor Oak Park by 4 wickets. O'Gorman and Hurst opened confidently for the Hospital, but Hurst was bowled after scoring 20.

With the score at 79, Morey was unfortunately run out. Then followed a hat-trick by Thornton, which left Guy's with six wickets down and only 84 runs on the board. But, thanks to some resolute batting by Birks and a short burst of hitting by Skea, the Hospital managed to scrape together 135. Birks played a very useful innings of 27 not out.

Fielding errors removed what hope there was of getting Westcliff out for under 135; several catches which should have been held were put on the ground, although O'Gorman took a good one in the gully.

Westcliff passed the Hospital total with four wickets in hand, and by the close of play had scored 177 for 9.

Scores.—Westcliff, 177 for 9 (Knight, 3 for 53; McClintock, 2 for 20; O'Gorman, 2 for 27; Morey, 1 for 12; Skea, 1 for 49).

Guy's

G. O'Gorman, c. Smith, b. Fletcher	19
A. V. Hurst, b. Fletcher	20
G. H. G. Chase, b. Thornton	26
L. G. Morey, run out	12
P. H. Birks, not out	27
D. C. Boyd, c. Smith, b Thornton	0
J. W. A. Crabtree, b. Thornton	0
S. N. Cole, c. Wheeler, b. Thornton	0
C. L. T. McClintock, c. King, b. Smith	5
J. H. H. Knight, l.b.w. King	2
R. L. Skea, c. and b. King	12
Extras	12
Total	135

Golf

THE Hospital team played extremely well to beat Northwood Golf Club on their own course by 5 matches to 3.

It was a glorious evening for golf, and the Northwood course was in very good condition.

The first three matches were won by the Hospital. Steven and Mathewson, playing good golf, also won their matches by substantial margins, and so brought victory to the Hospital.

It is to be hoped that this good form shown by the Hospital team in the early matches will be continued throughout the season.

Results were as follows:—

Guy's		*Northwood*	
J. C. Ritchie (3/2)	1	S. M. Whitteridge	0
J. W. R. Drury (2 up)	1	D. Banks	0
S. A. Marsh (5/4)	1	F. E. Barker	0
T. F. E. Brown	0	J. L. Bennett (4/2)	1
D. C. Steven (6/5)	1	W. J. Bond	0
W. James	0	C. H. Green (2/1)	1
W. G. Cross	0	W. R. Cunliffe (5/4)	1
J. G. Mathewson (4/3)	1	R. M. Worlock	0
Total	5	Total	3

GUY'S *v.* DR. KNOTT'S TEAM

THE Hospital team continued their winning form by beating Dr. Knott's team at the Royal Wimbledon Golf Club on Wednesday, 24th May.

The weather was glorious for golf, and the course was in perfect condition.

Four-ball matches were played and the Hospital won three of these by substantial margins.

We are much indebted to Dr. Knott for this annual fixture at Royal Wimbledon and for the splendid time he always gives us there.

Results were as follows :—

Guy's		*Royal Wimbledon*	
T. N. Praat and J. C. Ritchie (6/5)	1	E. Pearce and R. Russell	0
J. W. R. Drury and S. A. Marsh (4/2)	1	W. G. Angliss and S. Rose	0
D. C. Steven and T. F. E. Brown	0	V. Bartlett and R. Pearce (2 up)	1
S. G. McCallin and J. G. Mathewson (5/4)	1	C. Quartermaine and F. H. Knott	0
Total	3	Total	1

Guy's golfers would like to thank Dr. Bradfield, an old Guy's man, of Beckenham Golf Club, for his kindness in sending them tickets for the Exhibition Match between Padgham and Locke on Whit-Sunday.

J. C. RITCHIE,
Hon. Sec.

Hospital Information, etc.

Notices

ASTLEY COOPER STUDENTSHIP

This Studentship, tenable at Guy's Hospital Medical School, will become vacant on October 1st, 1939.

The student, who is called the " Astley Cooper Assistant to the Curator of the Gordon Museum," will be elected for a period of three years. The salary attached to the Studentship is approximately £130 per annum, and in addition a sum of £30 per annum is available for expenses.

The present holder is eligible for reappointment.

Particulars regarding the Studentship can be obtained from the Secretary to the Astley Cooper Trustees, Medical School Office, Guy's Hospital, S.E.1, to whom applications for the post should be addressed on or before June 30th, 1939.

POST-GRADUATE COURSES

Post-Graduate Courses are held during the months of February and October.

October, 1939.—Courses will be given in the following subjects : Anæsthetics (Local), Ceramics, Inlays, Crowns and Bridges, Oral Surgery, Orthodontics, Prosthetics, and Bacteriology.

Each course will last for one week, except that in Bacteriology, which will be an extended course taking place once weekly for six weeks.

The fee for each subject will be £8 8*s*.

Further details details concerning the courses to be held in October may be obtained from the Dental Sub-Dean, Guy's Hospital, London, S.E.1.

The Guy's Alumni Luncheon, at the British Dental Association Meeting at Newcastle, will be held on *Tuesday*, August 1st, not on Thursday as was announced in the last issue.

Pass List

UNIVERSITY OF CAMBRIDGE.

FINAL M.B. EXAMINATION.

Easter Term, 1939.

PART I.

Surgery, Midwifery and Gynæcology.

P. J. R. Davis — I. S. Eve

PART II.

Principles and Practice of Physic, Pathology and Pharmacology.

K. S. MacLean — A. Ponder

QUALIFYING EXAMINATION IN PHYSIOLOGY.

Easter Term, 1939.

G. W. Pinder — A. E. Thomas

Papers by Guy's Men

Broster, L. R., and Others. Paranoid psychosis with adreno-genital virilism successfully treated by adrenalectomy. *Brit. Med. J.*, 1939, i, 1220.

Vertue, H. St. H. Eumydrine in pyloric stenosis. *Arch. Dis. Childh.*, 1939, lxxviii, 173.

Mansie, J. W. Design and construction of partial dentures. *Brit. Dent. J.*, 1939, lxvi, 704.

Dowling, G. B., and Another. Dermatomyositis and progressive scleroderma. *Lancet*, 1939, i, 1424.

Clarkson, Patrick. " Infections of the Hand," 2nd Edn., Lewis, 1939.

Births

HERBERT.—On June 15th, 1939, at Elizabeth Garrett Anderson Hospital, to Joyce (née Clogg), wife of Professor W. E. Herbert, of Newlands, Worcester Road, Sutton—a son.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

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PASSIM

WE admit to being book-lovers. We enjoy reading books, even when badly written and badly printed, though we prefer to see excellent matter, an easy style, a pleasant binding, and columns of fine print on fine paper. We are not over-indulgent readers. "If one book seem tedious unto me, I take another, which I follow not with any earnestness, except it be at such hours as I am idle, or that I am weary with doing nothing," said Montaigne, and so is our practice. In books man collects his thoughts and experiences. "Thought constitutes the greatness of man. Man is but a reed, the most feeble thing in Nature, but he is a thinking reed," wrote Pascal. Thought also displays the littleness of man, as anyone who reads many books must observe.

To read a book we need comfort and congenial surroundings. Some find that comfort, reading and remembering do not go well together. It is said that Goethe preferred to read sitting straight up in a hard-backed chair for this improved his concentration. Some who possess little power of concentration must retire from all distraction—company, noises and objects suggestive of happier times (*e.g.*, beer-bottles and gramophone records). Others can concentrate in any surroundings—the late Lord Rutherford as a boy could read undisturbed in the midst of a brawling schoolroom. For others the only place to work in is a library, where the studiousness of the atmosphere no less than the number and dustiness of the volumes arouse the desire for learning if not the ability to acquire wisdom.

Guy's is fortunate in possessing an excellent small library in the Wills Library. This contains, including bound volumes of periodicals, over 15,000 books. It takes in a fair selection of current medical journals, and its chairs, though hard-backed, are leather-seated, deft compromise between comfort and discomfort. There are certain ways, however, in which the Wills Library might be improved.

In the Wills Library, with the exception of a small number of frequently used textbooks, the books and bound volumes of journals are kept in locked cases. To secure a volume that is not commonly in use one must ask the librarian to unlock the custodian bookcase and deliver it (which he does very willingly). The name of the book and of the borrower must then be entered in the borrowing book. The advantage of this system is that it limits the number of books which, presumably stolen, disappear from the library. Medical books being expensive, their replacement is expensive and cannot be repeated frequently by a small library. But consider the disadvantages.

There are two methods of using a library such as the Wills Library. One may seek information on a selected subject, or one may browse amongst books, examining any that excite one's fancy. Supposing that one is seeking information on some one subject, closed book-shelves are no small hindrance. One starts with a small bibliography and obtains, perhaps, a textbook and a couple of monographs from the librarian. These contain references to other books and journals, and one would like to turn to at least a few of these. The services of the librarian must again be obtained. When the new books are found they contain further references. The librarian must again be summoned . . . and so on. Such conditions do not ameliorate concentration or temper. And with closed book-shelves it is impossible to browse. Browsing amongst books is educative and

essential. In a well-organised library it enables one to familiarise oneself with the literature of any subject that one happens to be interested in and to form a judgment of the value of that literature. For instance, supposing one is interested in the Nervous System; in the shelves marked "Nervous System" one finds hard by the commonly used textbooks such important works as Gowers on Epilepsy, Sherrington on the Integrative Action of the Nervous System, Cushing on Pituitary Tumours; one dips into them and learns their worth. With the closed-shelf system, glass cases prison the books, keeping them alike from thieving hand and inquiring mind.

The open-shelf system then is a pearl of some price for which it is worth fighting. The problem is, if we are to have open shelves, how are we to stop thieves? Here we can only make a few summary suggestions. Stealing books from a library, though often regarded lightly, is a crime and an offence against all the users of the library. The punishment for such an offence should be the compulsory replacement of the book stolen and the forfeiture of the right to use the library. For those whose kleptomaniac tendencies are greater than their corporate feeling the librarian might be asked to sit at the exit and be given the right of examining any book that any person was seen removing from the library.

* * *

The Wills Library claims to be chiefly a reference library. Thus it contains no more than two copies of the more popular textbooks. It is argued that important textbooks should be bought by students or graduates, and that they may be obtained from Lewis's Library. We agree with this policy, but think that it should be logically carried out. At present the Wills Library fulfils two functions inadequately. It claims to be a reference library and it is used by many as a reading-room. It is defective as a reference library. An adequate reference library should have open shelves and must contain a wide selection of periodicals. In Guy's each department has its own small library and takes its own specialised periodicals, and the Wills Library embosoms only those which are left to it. To read an earlier number of the *J. Biol. Chem.* one must go to the Biochemical Department library, to read the *J. Pathology* one must go to the Pathology Department library, and so on. This system is wasteful of time and much detracts from the value of the Wills Library. A good reference library should be *the* centre of work—absorptive and creative—in any centre of learning. It should gather together the specialist, the graduate worker, the professor and the inquiring student. Such a reference library can be a centre of inspiration and bears good fruit in good work.

The Wills Library is used by many as a reading-room. In term-time it is often overcrowded. One may frequently see a student with a collection of bones and his "Gray," or with a microscope and his box of slides. Congestion hinders the uses of a library. It is suggested that congestion could be relieved by supplying an extra reading-room. Such a room should be fitted with comfortable chairs, tables and good lights, should be quiet and for the use of students, graduates or post-graduates who desire to read their own books at the Hospital in peace and comfort. It should not be expensive to provide such a room, but where is the room to be found? We refuse to believe that, if the effort is made, no such room can be found in the wide acres of the Medical School and New Pathology Block. At present some person or department has staked a claim to most of the suitable rooms. But the common good must come before private gain. There is a room used by those reading for "Primary" annexed to the Anatomy Department. The "Respiration Room" is used only one day a week in only three months out of the twelve. It is claimed by the Physiology Department. There is rumoured to be a suitable room in the Chemistry Department, and no doubt other possible rooms exist. If the worst came to the worst a bay of the Gordon Museum might be converted.

There is one final improvement that we suggest, and it is one that we feel strongly about. At present the Wills Library is open from 9.30 a.m. till 5.30 p.m., a total of eight hours in the day, for five and a half days a week. For most of us—students, professors, masseuses or residents—the mornings and afternoons are our busiest times. Classes, rounds, out-patients, lectures occupy us, and it is not till after tea and often even later that we breathe a sigh of relief as our set duties for the day are done. We can then settle down to catch up with some of our reading—or can we? Not in our own library, at any rate, though we are allowed to remove one single lonely book overnight if someone else has not already removed it. For the Resident it is especially hard. He is rarely free till the evening, and only too often not then. If he wants to consult a book or journal on some point of clinical science or treatment not seldom is he prevented by the library's locked doors. Since the Hospital exists for the welfare of the patient no less than for the student, it is surely absurd that the Residents should be denied access to information because of the conflict between the calls of their duties and the library's eight-hour day.

Diverticulitis

A Clinical Lecture delivered at Guy's Hospital on 28th April, 1939, by A. H. Douthwaite, Esq., M.D.

GENTLEMEN,—The presence of pouches in the large intestine, though recognised for many years by morbid anatomists, was not appreciated as a potential cause of symptoms until the end of the last century. When these pouches are present, but are unassociated with inflammatory change, the condition is known as *diverticulosis*. When inflammation supervenes it is then referred to as *diverticulitis*.

ÆTIOLOGY

The condition usually arises in persons over the age of forty, probably on account of gradual weakening of the musculature of the bowel wall. It is commonly stated that obesity is a predisposing factor, but it is doubtful whether this statement is accurate. Spriggs, in a review of 564 cases, concluded that obesity was not commoner in these patients than one would normally expect in a similar series of those in middle life. He also concludes that constipation is not a predisposing factor. It is alleged that frequent purgation leads to the formation of the diverticula, again a statement very difficult of proof in view of the immense number of people which subjects itself to daily purgation. In my own modest series of 32 cases, 22 were females of whom eight were noticeably obese, and ten were males of whom four were abnormally fat. Spriggs is satisfied that the condition is commoner in men than in women, and in his series 67 per cent. were males. In short, apart from the question of age, we have no certain knowledge of the influences which lead to the development of the disease. Lastly, I should mention the question of septic foci, because as I shall show you later, there is evidence of inflammatory change in the bowel in the earliest as well as the later stages of diverticula formation. It is quite impossible to dogmatise on the association of septic foci with this bowel complaint. One can only say that there is a conceivable connection, and the point should be borne in mind when considering treatment.

MORBID ANATOMY

As the result of X-ray examinations of the alimentary tract, Spriggs and his co-workers concluded that there was a pre-diverticular stage of diverticulosis. He says that in the affected portion of the gut the wall shows shallow, concave impressions deforming haustration, or replacing it by a closely serrated outline, and small diverticula are often seen near such an area. Re-examination after a year or two usually reveals numerous diverticula in the position where this fine corrugation had been. You will see in the slides of X-rays taken by Dr. H. M. Worth, which I will show to you presently, that areas close to frank diverticulosis and diverticulitis can be discerned showing these changes. It is naturally rare to be able to subject the bowel to naked-eye examination at this stage. The same workers, however, report that they have had some specimens which show on the peritoneal surface a fine irregularity produced by bunching together of the circular muscle fibres and separation of their bundles. Microscopy reveals a mild chronic inflammation in the muscular coat as well as in the mucosa and sub-muscosa. If these findings are generally confirmed, we may conclude that diverticula are not merely pulsion pouches, but result from the combination of inflammatory weakening, atrophy of advancing years, and pressure from within.

The size of the pouches, unless distended by water, varies from a millimetre to half an inch, but seldom greater because when they attain this size inflammatory change is almost invariably set up, and leads to shrinkage and distortion of the sac. In general, it may be said that the wider the neck of the sac in relation to the body of the diverticulum the less the tendency to inflammation, for the simple reason that it can the more easily empty out its contents as the result of bowel movement. The structure of the wall near the neck, and throughout the sac in small diverticula, consists of the normal structures of the wall of the gut, but the larger sacs usually contain no muscle except near the neck. When diverticulitis has arisen, widespread inflammatory changes with the formation of peritoneal adhesions distort the original picture and are well illustrated in the specimens which I have passed round.

STAGES

The pre-diverticular stage is seen radiologically in approximately 20 per cent. of cases of diverticulosis. Most patients with diverticulosis suffer no symptoms, and the condition is found frequently as the result of some routine examination. About 15 per cent. of those with diverticulosis ultimately develop diverticulitis.

SYMPTOMS AND SIGNS

a. Pre-diverticular stage. There are no characteristic symptoms of this stage, but it is not un-

common to obtain a history of intermittent flatulence, distension relieved by opening of the bowels, occasional discomfort in the left iliac fossa, and tenderness is found on palpation of the iliac colon. The symptoms are usually referable to the left side of the abdomen, because diverticula are relatively infrequent in the large gut proximal to the descending colon; they increase in number and size in the pelvic colon, but very rarely occur in the rectum. You will see, however, in some of these slides that they do crop up from time to time in the transverse colon. The avoidance of the rectum is probably related to its more complete and powerful muscular wall, for it is noteworthy that in the more proximal portions of gut the diverticula occur in rows between the tæniæ, often in appendices epiploicæ, and never pass through the longitudinal muscle. One of the worst attacks of pain I have witnessed was experienced by a patient in the pre-diverticular stage, and was clearly referable to intense spasm of the iliac colon. The pain was agonising, situated on the left side of the abdomen with radiation across the hypogastrium, and there was extreme tenderness and a considerable degree of muscular rigidity in the left iliac fossa. It abated somewhat on full doses of atropine and morphine, but nevertheless continued for several days. A barium enema at this time showed that the colon was contracted down to about a third its normal size from the level of the iliac crest to quite near the pelvi-rectal junction. As the result of medical treatment the whole condition subsided, and a subsequent X-ray showed a few diverticula with the fine serration to which I have already referred. The movement of the bowel was then unimpaired and there was no fixation by adhesions. There has been no recurrence of symptoms as the result of taking due care in relation to diet and other matters referred to at the end of this lecture.

b. Diverticulosis. As I have already said, there may be no symptoms or signs apart from radiological ones. Alternatively, the symptoms of the pre-diverticular stage may arise from time to time.

c. Diverticulitis. Here in addition to attacks of spasmodic pains there is usually a more constant type of discomfort described as a dull ache, or sometimes as burning, usually starting in the left iliac fossa and sometimes centrally in the hypogastrium, or again across the abdomen at umbilical level. There is persistent though variable tenderness over the iliac colon and if constipation has been present previously it is usually worse when this morbid condition arises. Sometimes, however, attacks of diarrhœa supervene. It is almost constant that signs and symptoms are aggravated by purges, and, in fact, the acute attack to which I referred in connection with pre-diverticular disease was initiated by the taking of castor oil. Vague dyspepsia may also be present, usually in the form of flatulence and belching after meals. At the peaks of discomfort it is not uncommon to find a moderate degree of pyrexia and leucocytosis. Rectal examination usually reveals no abnormality, though a mass may be felt in the pelvis if an involved loop of pelvic colon is tied down by adhesions. There are some who claim to have seen the mouths of diverticula through a sigmoidoscope. I have been less fortunate. Usually the difficulty is in the passing of the instrument, for the bowel is found to narrow suddenly as the result of spasm and inflammatory constriction, and attempts to push the tube further give rise to pain. In parenthesis I should warn you that it should not be regarded as a point of honour to plunge a sigmoidoscope up to the hilt in every patient whom you so examine. There is a very real danger of tearing the gut, even in the hands of experts. The sigmoidoscope does, however, help to distinguish between constriction of the bowel from inflammation and spasm, and new growth, for the latter can usually be seen quite easily and approached without difficulty. Examination of the fæces is often helpful, showing, microscopically, pus cells, and there is also mucus. Bleeding is not a feature of diverticulitis, but may arise, and occasionally be profuse, if there is a super-added polyposis in long-standing cases.

The X-ray appearances after a barium meal and after a barium enema are quite characteristic and enable one to decide whether the case is one of diverticulosis or diverticulitis. In the latter, serial films reveal no alteration in the position or shape of the diverticula in the affected area, and the bowel itself is usually deficient in normal haustration and is often found to be fixed. The films which I shall show you will, however, help more than words to indicate the immense value of radiology in the diagnosis.

DIFFERENTIAL DIAGNOSIS

The most important point in differential diagnosis is to distinguish diverticulitis from new growth in the lower part of the colon. The former condition may give rise to acute obstruction, and if these signs and symptoms occur in a patient who has previously been devoid of symptoms and who is found to be tender in the left iliac fossa and to present some degree of rigidity, the probability is that one is dealing with diverticulitis and not with growth. Warm olive oil or liquid paraffin enemas of half a pint to a pint in conjunction with full doses of anti-spasmodics, *e.g.*, one-seventy-

fifth grain of atropine, will often relieve the symptoms rapidly and thus strongly favour diverticulitis. In less urgent cases, where obstruction is not complete, an X-ray will generally help to distinguish between the two diseases. In a tumour the filling defect has recognisable edges presenting upwards and downwards in the lumen of the bowel. Likewise, as previously indicated, the sigmoidoscope may be of help. Sometimes a differential diagnosis is impossible and operation has to be performed, and even then the surgeon may be in doubt as to whether he is dealing with a carcinoma or a purely inflammatory condition. In either case the treatment is colostomy, and many patients who have been thus dealt with have lived for years afterwards in good health in spite of the belief at the time of the operation that they suffered from carcinoma. A left-sided pyosalpinx offers great difficulty in differential diagnosis, but it may be settled by careful attention to the history in relation to periods, vaginal discharge, and the findings on vaginal examination. In cases where perforation of the gut in diverticulitis occurs, and this may arise though not often, spreading peritonitis or pelvic abscess may be found, and this with a history of recurrent flatulent dyspepsia often suggests that the appendix is at the root of the trouble. There is no certain method of differentiating, but the treatment is the same in either case. I suppose this description would not be complete without mentioning the possibility of a left-sided appendicitis, but in view of its rarity the condition is not worthy of further comment.

COMPLICATIONS

In discussing differential diagnosis I have mentioned the most important complications, but should remind you that sometimes adhesions between the pelvic colon and bladder form and ultimately perforation may occur, giving rise to a vesico-colic fistula. Before this occurs persistent cystitis usually arises from the passage of organisms through the wall of the bladder. When free communication has been made the urine is naturally very foul, and air and fæcal material may be passed *per urethram*.

PROGNOSIS

The prognosis depends upon the stage of the disease. If recognised early in the pre-diverticular stage the probability is that complete cure can be effected. If diverticulosis be recognised, and the necessary precautions as regards the avoidance of irritants in the nature of purges and indigestible residue in the food be practised, again the probability is that the individuals will never develop symptoms. Yet again in diverticulitis with frank discomfort, the majority of patients can be kept in good health indefinitely if they follow the lines of treatment which I shall outline in a moment. When extensive adhesions have formed, particularly to the bladder, the outlook is by no means so good, for the condition is not easily amenable to any treatment, even surgical. Perforation and abscess-formation, though requiring surgery, do not materially affect the prognosis, for it may arise purely as the result of one weak diverticulum, and does not necessarily indicate widespread and extensive inflammation. Perforation and spreading peritonitis are attended by a high mortality.

TREATMENT OF PRE-DIVERTICULAR STAGE AND DIVERTICULOSIS

1. Eliminate focal sepsis.
2. Give HCl if achlorhydria is present.
3. Liquid paraffin to keep stools soft.
4. Hyoscyamus (*vide infra*).
5. Saline wash-outs (*vide infra*).

TREATMENT OF DIVERTICULITIS

As above, and also :—

Three ounces daily of freshly prepared culture in sterile milk of 200,000 lactic acid bacilli to the c.c. Alternatively give Sauerin (Martindale) tablets, four to six daily by mouth, if non-lactose fermenters are present in the fæces.

Two drachms of lactose twice daily with milk or on food. This acts as a mild laxative and discourages the growth of non-lactose fermenters.

Tr. Hyoscyami, 15 minims, four-hourly if the condition is painful.

Low-pressure wash-outs with N-saline : 18 inches high on alternate days.

Six ounces warm Ol. Oliv. or Paraffin per rectum at night ; this should be retained if possible.

In the event of obstruction give atropine sulph. gr. 1/75 : an enema of ox bile (B.P.) 1 oz. in one pint of warm water. If this fails perform colostomy ; continue saline wash-outs ; later repeat Ba. enema with a view *to closing* the colostomy, or short-circuit.

Diet should be free from salads, uncooked fruit, all food containing pips, skins, nuts and fibre ; spices, sauce and alcohol. When the inflammatory stage has subsided, salads and uncooked fruit may be taken if thoroughly chewed.

The indications for surgery are :—

1. Failure of medical treatment to relieve symptoms.
2. Persistent obstruction.
3. Persistent cystitis.
4. Vesico-colic fistula.
5. Perforation.

The Dental Society

THE HON. SECRETARY'S REPORT FOR THE SEASON 1938-39

THERE have been 11 ordinary meetings of the Society with an average attendance of over 82, which shows a very substantial rise on the previous years and is only five short of the record season of 1929-30. This high average I attribute to three factors :—

1. This season we were privileged to hear papers by four qualified men.

2. We had splendid support from the more junior students.

3. The papers read were all of a very high standard.

In addition, six students gave Casual Communications, and some 39 different members took part in discussions.

At the beginning of the season Professor Fenn, our President, very kindly renewed his prize for the best paper on a Prosthetic subject, but I am sorry to have to record that only two papers were offered. We must hope that more will be forthcoming next year. The Society prizes for the session have been awarded to :—

1. Messrs. K. R. D. Porter and J. W. S. Harvey —Best Paper, entitled " General Anæsthesia in Dental Surgery."

2. Mr. A. S. Halamandres—Best Prosthetics Paper, entitled " The Impression Problem."

3. Mr. C. H. Blockley, Best Casual Communication, entitled " Unusual Fracture and Repair of Maxillary Central Incisor."

Early in November the National Dental Students' Society met under the auspices of the Guy's Society when the subject of " Starting in Practice " was discussed. Over 130 students from five dental schools were present, and we thank Mr. Kelsey Fry for opening for Guy's. In March the National Dental Students' Society held its second Annual Dance, which, though socially a success, resulted in a financial loss. This is a new society and depends for its existence upon enthusiastic support from the members of this and other societies, and I would appeal to all our members to help the National Dental Students' Society to get under way.

During the season we sent representatives to the Universities of Liverpool, Edinburgh and Leeds, and to all the London dental societies, and we must thank our hosts on these occasions for their warm hospitality. The travelling expenses involved were very kindly defrayed by the Dental Council, and we are very grateful to them for helping us in this way.

On December 1st we held our Annual Dance. It proved so popular that all of our tickets were very quickly sold, and as a social function it was as enjoyable as any we have had. The Committee decided to make a gift of £5 of the profit of the dance to the Guy's Hospital Maintenance Fund, which leaves a net profit of £6 9*s*. 11*d*. Our thanks are due to Mr. B. D. Clerk and his Committee for their splendid effort. The Annual Dinner was again held at Grosvenor House, and although our numbers were a little short of last year, it was as pleasant an evening as ever and was notable for the fact that there were present as guests of the Society representatives of every dental school in England, bar one, and two from Scotland.

We are proud to record that during the year two of our Past Presidents were honoured. Mr. F. J. Pearce, president in 1921, received a Knighthood for Dental Services and Mr. W. E. Herbert, our president last year, was appointed the London University's First Professor of Dental Surgery. We extend to them our hearty congratulations. We much regret that Mr. Lewin-Payne, president in 1922, passed away at the end of January.

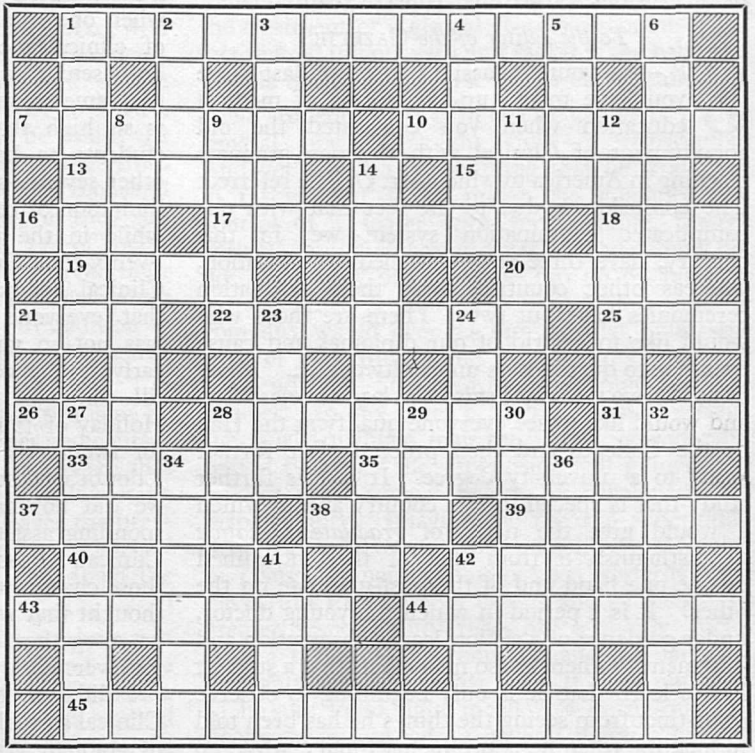
During the year our Watch Committee has been responsible for two minor improvements in the department. Twelve new operating stools have appeared in the Conservation Room, and we hope soon to see an extra sink in the Plaster Room of the Prosthetics Laboratory. I should like now to thank our President, Professor Fenn, for his invaluable support during the season, and I would like to record my own grateful thanks for his willingness at all times to advise me. His tremendous interest in the Society's welfare has in no small measure attributed to the success of the season. We sincerely hope he has enjoyed his term of office and will continue to support us as in the past.

We are greatly indebted to our Treasurer, Mr. R. K. Roberts, for so ably attending to our accounts. His excellent financial report is proof of his efforts on behalf of the Society.

I would extend my thanks to all the other committee members for their co-operation. In conclusion, I would like to say how much I have appreciated being the secretary, and I hope that the Society will continue to flourish and prosper.

KEITH R. TITFORD,
Hon. Sec.

Crossword No. 1



ACROSS

1. Wait for a speech? No, a cough!
7. Contains blood, although black.
10. Epitaph begins thrust.
13. Form rich soil.
15. His disease affects the spleen.
16. Bursa.
17. Energetic.
18. Dye within.
19. Carried by first-year students.
20. Both dresser and scalpel should be.
21. Muscle when strung.
22. Sends back man in cells.
25. Qualification to practise.
26. Appropriate to an epileptic.
26. Kinder, in fact more than human.
31. On prefix.
33. Quotes.
35. Fluid discharge started by animal.
37. Always after Bob, but cut.
38. Filthy eyelid lesion?
39. (Rev.) Bathed.
40. Eastern equivalent of chewing-gum, but more stimulating.
42. Associated with coroners' juries.
43. Paradoxically, a successful enema may be.
44. Responsible for many a gentleman's preference.
45. Cause of yawning? (2 words, 7 and 6.)

DOWN

1. Mean tea. (Anag.)
2. Skin, especially of fruit.
3. His fluid is disinfectant.
4. Albino is elsewhere without his son.
5. Element of blood.
6. Unchanged particles? What ideas!
8. Mad reasons, but they get you there!
9. Senior tree.
11. Wet sheets.
12. Describes Man of Iron.
14. These can't be seen through.
23. Crossword birds.
24. Is food discussed at this assembly?
27. Eskimo's trousers?
28. As a result of this, curtailed.
29. No, this is.
30. Circular bones?
32. Part of the body.
34. Confine.
36. (Rev.) Storehouse for amyloid?
41. Desire.
42. Estimate.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 25th July.

A Prize of 5s. is offered for the first correct solution to be received.

Correspondence

Post-Graduate Instruction

To the Editor of the GAZETTE

SIR,—In your "Passim" note of last issue you have mixed up two forms of medical education when you contrasted the old appointment of Clinical with the post-graduate teaching in America to which Mr. Ogilvie referred. The confusion is due to the fact that with our complicated examination system we, in this country, have three stages of medical education, whereas other countries with their graduation ceremonies have but two. There are those who would like to get rid of our diplomas and cause everyone to qualify by a university degree. Many of us believe that their existence leads to elasticity, and would like to see everyone qualify at the Hall or the Colleges and then proceed after further study to a university degree. It is this further study that is special to this country and to which I would give the name of *graduate education* to distinguish it from that of the unqualified on the one hand and of the post-graduate on the other. It is a period in which the young doctor, under guidance of a senior, learns observation and judgment. There are so many facts that a student has to learn that he is only beginning to observe as distinct from seeing the things he has been told to look for when he is up for his Final; while no one can learn judgment until he has some responsibility.

This period, so essentially English, of Graduate study may be divided into two; in the first part the young doctor goes over again all that he has learnt as a student while he is being initiated into the conduct of practice. In the second part, he is beginning to study in greater detail some limited portion of the Art. He begins to become a physician or a surgeon, or he starts on a career of preventive medicine or as an administrator; and he goes in for his M.D. or M.S. or takes his diploma in Public Health. It is not until he has done these that he enters on the stage of post-graduate education.

It is that Graduate education in its first part that the old Clinical at Guy's gave, in better measure, perhaps, than any other school. Last July the late Sir Cooper Perry told me that when he came to Guy's he found two appointments which he thought were of outstanding value and which did not exist at other schools. These were Surgical Ward Clerk and Clinical, and in all the changes that he made as Dean or approved when Superintendent he took care to retain these two. The late Dr. Lauriston Shaw described it to me as the time when one's mind was opened to all the beauties of clinical medicine. Many of my colleagues, both senior and junior, who are still alive, held the same views about it. One of them classed it so high that, assuming the annual entry of students to be one hundred, even though the other seventy-six definitely lost something by the limitation of beds, he thought this loss was worth while in the interest of the nation so long as twenty-four Guy's men went into the world with Clinical behind them. It must be remembered that everyone did not value it. Probably it was not so good when it went as it had been early in the century. From midnight Saturday till midnight Monday over the August Bank Holiday of 1906 Dr. Fawcett was in the Hospital for twenty-six hours out of the forty-eight, and I doubt whether there was a single week in which we did not have down after dinner the corresponding assistant surgeon with the physician in Clinical. Probably its disappearance was one of those changes that had to come, but I have always thought that when it went it was a pity it did not go altogether to remain as a memory—perhaps for ever.

I did not, however, sit down to write of old Clinical as such, but of old Clinical as an example of graduate education; for I believe that this is the part of medical education which we must regularise in order to get us out of our difficulties. It is always a matter of regret when an unofficial way of doing anything is brought under rules and regulations, but if this Graduate period of medical education is of the value that we believe it to be it should be open to all, and its organisation may afford a way out from the impasse into which we have got.

Many of those who are interested in medical education, and who are trying to see it widely and to see it whole are appalled at the number of facts that the student has to learn by the time he goes up for his Finals. They have left him no time in which to learn how to use these facts. Some desire a solution by extending the curriculum. Others are opposed to this not only because the amount of undigested knowledge that the human brain can absorb is limited, but also, and chiefly, because it would limit the recruitment of the medical profession to the ranks of the well-to-do. Those of us who know the People, and who come from the People, believe that it is better if the majority of medical men and women who are to serve the People in their sickness and for their

health should come from their own rank, or from those with an income very little above it. I would define the People as being all those who would come under the National Health Insurance Acts supposing these were extended to all persons and dependants in the same financial position as the worker who comes under it to-day. It is important to remember that these constitute ninety per cent. of the nation, and I would say that in order to have a full understanding of them it would be well if the majority of all medical students came from families with incomes not above one thousand pounds per annum. Now fathers, if they are also to put aside money for the old age of themselves and of their wives, cannot afford to put their sons and daughters into medicine if the curriculum is to last more than the five years, in addition to the year that has already been put in by taking the preliminary sciences out of it.

Other authorities seek to solve the problem by adding more and more subjects, classes and courses to a curriculum that is already so overloaded that it needs lightening drastically and adequately. They remind me of a person who leaves the beer-tap on when the pint pot beneath is already overful with the excess running to waste and down the drain.

How are we to find an alternative to these two which will be a solution of the problem of the overloaded curriculum? To answer this question we must consider the aim of the present medical curriculum. When, with the passing of the apprenticeship system, this was first drawn up it was assumed that everyone would, on qualification, go for a time into general practice and that the great majority would pass their lives as family doctors. We are still aiming at turning out ready-made general practitioners, ignoring the three facts that we cannot do it, that we ought not to do it if we could, and that it is unnecessary to do it even if we ought. Let us consider each of these in turn. The apprenticeship system passed before my time; no doubt it had to go, but when it went there went with it something that we have never been able to replace—knowledge of the patient. I do not think that this was then realised. To-day the newly-qualified person knows something about everything except the patient. In the old days the apprentice mixed with anyone and everyone and treated a large number of them under the guidance of his master, who also taught him the conduct of practice. When he came up to walk the hospitals he applied the knowledge that he learnt to the human being that he already knew. To-day we learn first on frogs and guinea-pigs. Being saturated with scientific knowledge, we apply the human being to our knowledge; when a child jumps about a ward we think it as great a nuisance as is an agile frog, and through our agents, the nursing profession, we shush it into stillness and silence. We put a hot fomentation on a baby, and think we know all about the treatment of a gluteal abscess, ignorant of the fact that all infants vary and that it is the baby and not his buttocks that first merits our attention.

No student to-day is fit to take charge of a large general practice at the time of registration. And yet that is the one thing that he is allowed to do without being under the guidance and control of a senior with very definite, though variable, limitations as to what he may or may not do. The only other job he can do on his own responsibility is that of ship's doctor, and no company would ever let him do that unless the time of departure would be delayed if they did not send him—and even then he would have the skipper. In any other branch of medical activity the newly-qualified man must for a considerable period be under the supervision and guidance of one or more seniors before he develops a full responsibility. Imagine the medical superintendent of a fever hospital going on holiday and leaving in charge a man who registered yesterday and passed his Final a week before, and yet he has no greater responsibility than has a family doctor with a panel of two thousand and as many dependants again upon his list. It does not seem to be any more right to allow a newly-qualified doctor to go out into a general practice without guidance than it would be for him to take the lives of his patients entirely into his own hands in any other branch of medical activity. In other words, the period of graduate study under probation should be as essential for general practice as it is under county councils, Services and municipal authorities in any other branch of medical activity.

The idea of turning out a ready-made general practitioner on qualification dates from the time when it was assumed that the vast majority of the profession would go into practice. This was probably true of the seventies and eighties when the curriculum was being evolved; it is certainly not true of to-day. It is a very difficult thing on which to get exact data, but a few considerations will show that it is so. Physicians used to be limited to London and the provincial teaching centres. Consulting physicians to-day are to be found in every county town. A surgeon is in touch by telephone and car with practically every cottage and farmhouse in the country. The throat specialists have penetrated almost into every village, and they are but one group among many. Services have arisen and developed

—tuberculosis, children, ante-natal, post-natal. The R.A.M.C. was not in existence, aeroplanes were unheard of. Municipal and county council services, both therapeutic and preventive, were mere skeletons, and many members of them were part-time officials who were also general practitioners. Pathologists were hardly known and bacteriologists had not evolved. One cannot believe that more than half the efforts of the profession as a whole are to-day directed towards general practice. Some years ago the clerk to the London Insurance Committee worked this problem out for me from the other end by taking the numbers of persons on the panel and their relation to the population as a whole. He came to the conclusion that probably less than fifty per cent. of the profession were to-day in general practice, and certainly not many more.

What we need to-day is not to turn out ready-made family doctors on qualification; but to guide students up to a standard of general medical knowledge to which everyone in the profession should attain and from which, after a year at least of graduate education, earning his living under the guidance and control of a senior, he could branch out into his special life's work, remembering always that to-day general practice is just as much a specialty as is throats and ears.

It may be said, "What is the difference between a year of graduate work under guidance and control and extending the curriculum by another twelve-month?" The answer is, first, that he would have his examination behind him. He would not be compelled to pass another examination at the end of it. He might be reading for his M.B., or he might put it off until his period of probation were passed, or he might not take it at all. In any case the compulsion of the examination system would be behind him, the fear that if he did not get through he might never be able to earn his living as a doctor would be passed.

Secondly, he would be earning his living, and no longer dependant upon his father. If it were possible I would make it compulsory that any employment in this period must carry with it board and lodging with washing and a few shillings per week for clothes and pocket money. Do not think that I wish to crowd the children of the well-to-do out of the profession. The flourishing state of the medical schools of Oxford and of Cambridge show how valuable are recruits from this rank of income. What I want to insist on is that the admission to the profession is not so organised as to limit it to these.

Thirdly, he would pay nothing for his education. No one has ever received payment for his guidance and control. Medical Officers of Health train assistants and medical superintendents of fever or other hospitals teach their A.M.O.'s. Many a member of a hospital staff to-day looks back with gratitude upon the teaching that he had from some old country practitioner during the time that he served under him as an assistant or a *locum tenens*. If the graduate period became compulsory for all, so should the conditions under which it has been available for the few.

It is important to realise that this period of graduate experience is not one in which to become a specialist. In it the young doctor learns how to use the knowledge that he has already acquired, how to observe and to develop his judgment, and how to acquire some knowledge of the conduct of practice.

Supposing that some reorganisation of the admission to the profession, such as I have outlined above, came about, is there anything now in the curriculum that could be lifted out of it into some later stage of medical education? The answer is, "Yes." Obstetrics could be lifted bodily out and put into the period after that of graduate study and experience. Obstetrics to-day is a specialism, practised but by a few. It might be for the benefit of the nation if these were still fewer. We have already seen that it is only about fifty per cent. of doctors that go into general practice. And of those only a few practise obstetrics. We do not need to turn out ready-made family doctors, but even if we did it would be quite possible to be a very efficient practitioner and yet do no midwifery. It is not a part of that general medical knowledge with which every medical man, from a neuro-pathologist to a throat and ear surgeon, should at some time have had a bowing acquaintance. The final examination in obstetrics is to-day no more essential to the qualification of a doctor than is the C.M.B. for the registration of a nurse. To remove it from the curriculum would relieve this of some four months that are needed for the study of other branches of the art; it would save students from learning by heart a number of facts which over seventy-five per cent. of them are never going to use. It would return to the medical side some forty beds which are badly needed for the teaching of general medicine and would put gynæcology into line with the other special surgical departments. Finally, it would put the practice of midwifery where it rightly belongs to-day—into the hands of midwives under the guidance of skilled specialists who are more and more giving the whole of their time to the subject to-day with, or, better still, without the practice of gynæcology.

I doubt whether drastic reforms such as I have indicated could be carried out without legislation.

Such legislation might bring on to the floor of the House the whole organisation of the medical profession and the constitution of the General Medical Council. I think we should all hate to have to go through such a thing. If a reform of the curriculum and of admission to the profession can be carried out radically and efficiently without legislation, I should welcome it. But if it cannot so be done, we have got to face it, for everyone who has had any experience knows that the present position of medical education is thoroughly unsatisfactory. The more the subject is discussed the better, not only by seniors whose views are prejudiced by the past, but also by juniors, who will probably have become seniors before the change has come about. In the meantime the placing of obstetrics at the end of the student's career is a step in the right direction. It is the only recommendation of the Report of the Curriculum Conference that sat from 1931 to 1935 that has been put into being. It was incorporated in that report with a view to bring the time when a student studies the subject nearer to that when as a family doctor he would be practising it. It is interesting to note that it is being brought into effect at a period when, by the changes of time, it is already out of date. It will, however, have two good effects. It will keep alive this Report on the Curriculum, which has in it many other valuable suggestions. It will prevent students from taking an interest in obstetrics only at a time when they are supposed to be studying far more important subjects, such as that of diseases of the nose, throat and ear.

Yours, etc.,

T. B. LAYTON.

Guy's Hospital,
S.E.1.

Reviews

Royal Northern Operative Surgery. By the SURGICAL STAFF of the Royal Northern Hospital. Edited by SIR LANCELOT BARRINGTON-WARD. Published by Messrs. H. K. Lewis & Co., Ltd. Pp. 551. *Price* 42*s*.

THE aim of this book is "to produce . . . a live surgery to help and refresh the practising surgeon." It is an account of surgery as practised at the Royal Northern Hospital. All classical procedures have been eliminated from the text and in most cases only one "well-tried way of performing any given operation" has been described. In this respect the reviewer finds it difficult to agree with the statement in the preface that "the description of several methods tends to confuse rather than guide the reader." The practising surgeon, if he be capable of practising surgery, can surely be credited with the ability to weigh the *pros* and *cons* of different methods of attaining his ends. This absence of discussion throughout the book detracts seriously from its merits. It is, however, the considered plan of the various contributors and so must not be allowed to bias one's judgment of the subject matter produced.

The book is of excellent appearance. The publishers once again maintain their highest standards, and the illustrations are magnificent. The individual articles are not signed, which seems a pity. Apart from the easily recognised writings of the well-known specialists, one is usually in doubt about the identity of the author, and consequently of accepting his dogmatism. The articles on orthopædic surgery and the surgery of the rectum, ascribed to Mr. Eric Lloyd and Mr. Gabriel respectively, are among the outstanding chapters of the book. The remaining articles are clearly written and, whilst one may not agree with some of the opinions expressed, there is relatively little material capable of serious criticism. There is, however, remarkably little discussion on the indications for any particular operation, and this again detracts from its merits in the opinion of the reviewer.

The editor and his colleagues are to be congratulated on producing an attractive, readable, and in some places excellent book, but its field is somewhat limited. On account of its small size and dogmatism it cannot be considered as a reference book. The absence of discussion of indications and alternative procedures makes it unsuitable as a text-book of operative surgery for higher examinations. The young surgeon, however, faced with an unfamiliar operation to perform, will find here a way out of his difficulties.

S. H. W.

Dietetics in General Practice. By LESLIE COLE, M.A., M.D. (Cantab.), F.R.C.P. Published by J. Bale. Pp. 150. *Price* 6*s*.

THIS book has been written for general practitioners who have found the current literature on dietetics too detailed and too full of seemingly endless calculations which tend to mask the broad principles of the subject, but it should also be of great use to those working in hospitals where there is no dietetian.

The author very wisely starts by stressing the

important point, so frequently forgotten, that before preparing a diet for any abnormal condition a thorough knowledge of the principles of normal nutrition is essential.

Each section contains a list of suitable instructions for the patient and a selection of sample diets. A large section is devoted to diabetes with some very useful condensed notes on the differential diagnosis of glycosuria. Several sample diets are given, and these would seem to be arranged for two doses of soluble insulin, night and morning. It is to be regretted that there are no diets showing the distribution of carbohydrate for the use of retard and zinc protamine insulin. No lists of food values are included, but the figures used in the diets are taken from a very well-known source. One cannot help thinking, however, that such weights as 2/5th oz. of butter and 1-1/3 oz. of bread must tax the average patient's ingenuity to its utmost, using the types of scales most usually found in the homes of diabetics.

For so short a book there is a wealth of useful information, and it should help many people to realise that dietetics is not as complicated a subject as they had hitherto supposed. N. T.

Essentials of Fevers. By GERALD E. BREEN, M.D., D.P.H. Published by Messrs. E. & S. Livingstone. Pp. 274. *Price* 7*s.* 6*d.*

THIS book gives a concise account of the fevers, but in its attempt to be concise it has degenerated in parts into a mere classification, for the understanding of which the reader must know already the items classified. This applies in particular to a small note on coughs; a few words of description would make this note invaluable. The first chapter suffers from this attempt at being concise; it concerns the bacteriology of the fevers, but for the good student who knows his bacteriology it is redundant, and to the rest it may be incomprehensible. The second chapter on the reactions of the body to disease and to serum give the first indication that this is a useful book. The clinical descriptions of the individual fevers are excellent, and a short note on common mistakes and fevers and the law complete the volume and justifies to the full its title. H. J.

Gardiner's Handbook of Skin Diseases. By JOHN KINNEAR, M.D. Published by Messrs. E. & S. Livingstone. Fourth Edit. Pp. 239 *Price* 10*s.* 6*d.*

THE fourth edition of this excellent little book ably maintains the tradition of its predecessors. Its author, disclaiming at the outset any attempt at an exhaustive work, has discriminated admirably between facts essential to a student embarking on the study of skin diseases and facts which are only of interest to a specialist. In this way he has managed to produce a book which is extremely easy to follow and to read, but which at the same time contains the essentials of knowledge necessary for one beginning to be interested in dermatology. This subject is one that frequently is dull to read and conjures up in the student's mind visions of word-pictures describing intimately the appearance of lesions which he cannot hope to visualise, followed by an exhausting account of liniments and ointments which he cannot hope to memorise.

In this book, however, the ointments are left to a small appendix and the descriptions are largely replaced by excellent illustrations and still more admirable photographs by the Dufay colour process. For collecting these the author certainly deserves congratulations. He has concentrated, in the text, on describing the natural history of skin disease and calling attention to the fact that skin lesions, in the main, are expressions of an underlying general bodily disturbance. He describes many measures of general treatment. Perhaps he might have emphasized some aspects of this general pathological process more strongly; for example, the importance of diet in the treatment of seborrhœic states and of foci of infection in such diseases as erythema multiforme and psoriasis, where teeth or tonsils are frequently to blame. The author counters, however, this lack of emphasis on these matters by dogmatising on the importance of intestinal toxæmia and even advocates—like one preaching some new gospel—the " modern " treatment of colon lavage. One had hoped that the method of treatment by the laundry had been finally exploded within the profession itself! It is certainly a pity that such examples of uncritical thinking should be allowed to enter such a book as this. There was no need to insert these loose theories. They only detract from the general standard of the work.

Mention of " rheumatic toxins " as a cause for erythema multiforme means nothing at all, and the printer's ink might just as well not have been wasted. But if the reader is prepared to overlook these few loose phrases he will find this work a real help as a grounding in dermatology, and this small book is recommended to the student to read. He will find sentences of an English that will make him squirm, if he be sensitive, but the medical student who has safely reached this stage in his career is inured no doubt to the careful torture of his mother tongue which takes place in most textbooks of medicine. At least he will find this book very clear and very easy to read, and that, after all, is the important thing to those who are searching for knowledge.

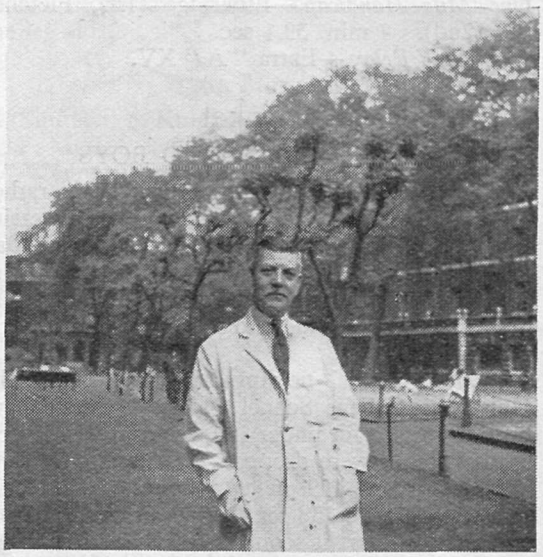
B. W. H.

Guy's Faces

No. I—ALFRED BAKER

ALFRED BAKER was born 54 years ago in Bermondsey. He left school at 13½ and became a laboratory boy at Guy's with seven shillings a week wages. His first job was cleaning windows in the Physiology Theatre. After he had been at Guy's for 18 months he attended night classes in elementary chemistry, woodwork and history. After a further 18 months he was given the job of senior laboratory assistant in the Physiology Department by Professor Pembrey, which he has held ever since. In 1905 a centrifuge exploded and blew him through a window into the Park. Having survived this, Mr. Fagge wanted to amputate his arm because of the injuries. Professor Pembrey intervened, and his second arm is still preserved for the Physiology Department. (Great are the works of surgeons, but greater are the works of Nature.) During the War he, his wife and his assistants catered for the teaching staff. He has been closely associated with the Residents' Play since 1905. Politics—Labour. Diet—generous. Favourite pastimes—cycling, darts and penny bets. He has an excellent memory for names.

Comments on students.—There are many more of them. In 1916 an average histology class consisted of thirty to forty students; now there may be eighty to a hundred. Students' practical work is now much more interesting and less cut-and-dried than it used to be. The War made a great difference to students. Prior to 1914 students treated the Medical School as a kind of club and



cared little for the results of their examinations. Their fathers did not appear to care either. Now they are more serious and work harder.

Sport

Guy's Hospital Sports, 1939

WE were very lucky to have a reasonable afternoon for the sports this year. Many of the events were run on a handicap basis to create a wider interest, and the number of entries was well above the average. Some light-hearted events such as a three-legged race and sack race were also included in the programme. A very good sprint relay between the Nurses and Massage Students resulted in a win for the latter.

One of the most interesting and amusing events was a 220-yards Basket-carrying Race by some members of the Borough Market Sports Club. They carried twelve half-bushel baskets on their heads and their skill in the high wind was amazing.

Most of the performances were on the whole average, but G. G. T. Fletcher won the half-mile in 2 mins. 3.3 secs. Rosenberg won the shot at 36 ft. 10 in., and Etheridge won the mile and steeplechase. Kynaston equalled the pole vault record of G. R. Blackburn by jumping 10 ft. 6 in.; this gained him the Clement Lucas Cup for the best performance.

The inter-club relay was well won by the Extra " A " XV—there were no disqualifications this year!

The Matron very kindly presented the prizes at the conclusion of the sports.

RESULTS

Long Jump.—Stanley (1st), Wotton (2nd). 18 ft. 8 in.

Pole Vault. — Kynaston (1st), Swift (2nd). 10 ft. 6 in.

880 *Yards.*—Fletcher (1st), Etheridge (2nd). 2 min. 3.3 sec.

Weight.—Rosenberg (1st), Fuller (2nd). 36 ft. 10 in.

100 *Yards.*—Hanson (1st), Morey (2nd). 10.4 sec.

Steeplechase. — Etheridge (1st), Merryweather (2nd). 4 min. 18.1 sec.

Javelin.—Wotton (1st), Teubes (2nd). 128 ft. 6 in.
150 *Yards Handicap.*—Prendergast (1st), Wilson (2nd). 16 sec.
Sack Race.—Emslie (1st), Cole (2nd).
High Jump.—Wotton (1st), Griffin and Chase (2nd). 5 ft. 4 in.
Discus.—Fuller (1st), Teubes (2nd). 76 ft. 8 in.
Three-legged Race.—Bulstrode and Wiggins.
One Mile Handicap.—Etheridge (1st), Fletcher (2nd). 4 min. 39.1 sec.
Inter-Club Relay.—Extra "A" XV.

Cricket

GUY'S *v.* U.C.S. OLD BOYS

ON Saturday, June 24th, Guy's drew a rather uneventful game with the University College School Old Boys at Honor Oak Park. The Old Boys batted first and declared at 198 for eight. Of these, Davies scored 101; at one time Davies had scored 100 out of the first 130 runs.

If the Hospital fielding had been better the University College School Old Boys should have been dismissed for under 150, but as it was several costly catches were dropped.

Set to score 199 in two hours, Guy's only managed to raise 158 for the loss of nine wickets. After a slow start it soon became evident that the Hospital would not be able to make the runs, and in the end it became a matter of playing out time.

Scores.—University College School Old Boys, 198 for 8 declared (Knight, 4 for 48; Morey, 3 for 24; O'Gorman, 1 for 21; McClintock, 0 for 21; Skea, 0 for 28).

Guy's

A. V. Hurst, b. Taylor	13
G. O'Gorman, b. Taylor	37
L. G. Morey, c. John, b. Fleming-Griffin	26
P. H. Birks, c. Davies, b. Robertson	12
D. C. Boyd, b. Robertson	2
G. H. G. Chase, c. and b. Robertson	18
D. N. Fuller, not out	30
H. A. Thomas, l.b.w. Fleming-Griffin	5
R. L. Skea, b. Fleming-Griffin	7
C. L. T. McClintock, b. Taylor	1
J. H. H. Knight, not out	0
Extras	7
Total for 9 wickets	158

GUY'S *v.* PINNER

ON Wednesday, June 28th, Pinner beat Guy's at Pinner by 3 wickets. As is usually the case for this fixture the weather was cold and play was interrupted several times by rain.

Guy's batted first and scored 174, 95 of which were scored by Hurst. Going in first, he played an extremely useful innings, and was unfortunate to be caught when only five short of his first century for the Hospital. If only Hurst could play his cut shots along the ground instead of over gully's head he would be a most disheartening batsman to bowl to, as he hits hard and can hook the ball for six whenever it deserves it.

Pinner knocked off the necessary runs for the loss of only seven wickets, thanks mainly to a good innings of 79 not out by Whaley, their captain. If Guy's could have got Whaley out they probably would have won as the other batsmen did not look like making very many runs.

By the close of play Pinner had scored 193 for eight wickets.

Scores.—Pinner, 193 for 8 (Knight, 4 for 68; O'Gorman, 2 for 47; McClintock, 1 for 44; Morey, 0 for 25).

Guy's

G. O'Gorman, c. Paige, b. Campbell	13
A. V. Hurst, c. Whaley, b. Colin-York	95
L. G. Morey, b. Colin-York	0
P. H. Birks, c. Paige, b. Campbell	0
J. W. A. Crabtree, b. Campbell	0
J. A. L. Leeming, b. Colin-York	27
D. C. Boyd, b. Campbell	11
T. R. Wooldridge, b. Campbell	2
H. A. Thomas, l.b.w. Colin-York	1
C. L. T. McClintock, not out	15
J. H. H. Knight, c. Shaw, b. O'Dell	1
Extras	9
Total	174

GUY'S *v.* CROFTON PARK

GUY'S had an easy victory over Crofton Park on Saturday, July 1st, at Honor Oak Park. Hurst and O'Gorman opened for the Hospital and put on 131 runs before Hurst was bowled. This is the highest opening partnership of the season so far; both batsmen played attractive cricket, although O'Gorman had his full share of luck. Hurst again batted well and scored 66.

Morey and Boyd carried the score along at a good pace and, after batting for just over two hours, Guy's declared at 222 for six wickets.

Except for Jordan, who made 41, none of the Crofton Park batsmen played the bowling with much confidence. They were all out for 120.

Scores.—Crofton Park, 120 (Knight, 8 for 30; Donner, 1 for 23; Morey, 0 for 20; Skea, 0 for 35).

Guy's

G. O'Gorman, c. Jenkinson, b. Seabrook	67
A. V. Hurst, b. Seabrook	66
L. G. Morey, b. Hush	36
P. H. Birks, run out	6
D. C. Boyd, c. and b. Hush	21
D. N. Fuller, c. Seabrook, b. Twohy	4
H. A. Thomas, not out	5
Extras	17
Total for 6	222

S. N. Cole, B. G. E. Donner, R. L. Skea and J. H. H. Knight did not bat.

SEMI-FINAL CUP MATCH
GUY'S *v.* ST. MARY'S

GUY'S entered the final round of the Inter-Hospitals Cup matches by beating St. Mary's at Honor Oak Park on Sunday, July 2nd, in no uncertain manner.

St. Mary's won the toss and decided to bat on what should have been a perfectly easy wicket. Guy's took the field with some apprehension as St. Mary's were fielding an impressive batting side. But with only seven runs on the board Chase took a well-judged catch to dismiss Muller, the St. Mary's captain. Fifteen runs later, Wynne-Wilson was bowled by Skea. This brought Snurson and McRae together; these two only scored slowly against a very steady Guy's attack, and at 1 o'clock had scored 90. As McRae had made a century for Somerset the day before there seemed a chance of this partnership adding a lot of runs, but the game suddenly took a different turn. McRae was l.b.w. after scoring 22, and Morrison played late to his first ball and was bowled—four wickets down for 90 runs.

Fifteen runs later the next batsman was also bowled. Morey caught an excellent catch low down in the slips off the last ball before lunch, and lunch was taken with the total at 111 for six, a very satisfactory morning's play from the Guy's point of view.

In the second over after lunch three more wickets fell, and amongst them Snurson's, who had batted very well for 63. St. Mary's were all out for 120, a total which illustrates the value of Snurson's innings.

By this time some heavy rain-clouds were looming ominously around the ground and a few spots of rain fell as Hurst and O'Gorman opened the Guy's innings. Fortunately, rain only stopped play for about half an hour.

An opening stand of 62 really decided the result of the game. Both batsmen played well. Hurst especially being full of confidence. O'Gorman was caught in the slips after scoring a useful 22 and Hurst batted well for 35. Chase (23), Morey (24 not out) and Birks (4 not out) all batted well, and St. Mary's total was passed with seven wickets in hand.

The Guy's fielding throughout the game was very keen and the standard high. Thomas kept wicket excellently, taking the ball very well on the leg side.

St. Mary's

G. Snurson, b. Knight	63
C. F. Muller, c. Chase, b. Knight	5
W. Wynne-Wilson, b. Skea	4
F. M. McRae, l.b.w. Knight	22
R. W. Morrison, b. Knight	0
R. T. Campbell, b. Knight	7
T. A. Kemp, c. Morey, b. Knight	5
J. Higginson, not out	2
C. J. Baker, c. Leeming, b. Knight	0
D. Howell, b. Knight	0
R. H. Taylor, b. Knight	0
Extras	12
Total	120

Knight, 9 for 38; Skea, 1 for 39; Morey, 0 for 15; McClintock, 0 for 16.

Guy's

G. O'Gorman, c. Higginson, b. Howell	22
A. V. Hurst, c. Howell, b. Muller	35
G. H. G. Chase, b. Morrison	23
L. G. Morey, not out	24
P. H. Birks, not out	4
Extras	14
Total for 3 wickets	122

J. A. L. Leeming, A. C. C. Hughes, H. A. Thomas, R. L. Skea, C. L. T. McClintock, and J. H. H. Knight did not bat.

Golf

GUY'S *v.* MOOR PARK

THE Hospital team lost their first match this season when they were opposed by a very strong side at Moor Park. However, the Hospital golfers played good golf and managed to gain three points.

Ritchie halved with Hayward, Moor Park's back marker, after a very exciting match. Drury and Brown both won their matches for the Hospital and did extremely well to beat opponents

with lower handicaps than their own on this long and testing course.

Results were as follows :—

Guy's		*Moor Park*	
J. C. Ritchie	½	F. H. Hayward	½
J. W. R. Drury (2/1)	1	W. A. Beare	0
S. A. Marsh	0	J. W. Jennings (5/4)	1
D. C. Steven	0	J. H. S. Molineux (5/4)	1
J. S. Breen Turner	0	J. E. Troup (8/7)	1
P. F. E. Brown (3/2)	1	T. A. Wormesley	0
W. G. Cross	0	P. W. Bennett (3/1)	1
J. Dossor	½	G. A. King	½
Total	3	Total	5

Hospital Information, etc.

Notices

DENTAL SCHOOL

POST-GRADUATE COURSES

Post-Graduate Courses are held during the months of February and October.

October, 1939.—Courses will be given in the following subjects: Anæsthetics (Local); Ceramics; Inlays; Crowns and Bridges; Oral Surgery; Orthodontics; Prosthetics, and Bacteriology.

Each course will last for one week, except that in Bacteriology, which will be an extended course taking place once weekly for six weeks.

The fee for each subject will be £8 8*s*.

Further details concerning the courses to be held in October may be obtained from the Dental Sub-Dean, Guy's Hospital, London, S.E.1.

THE THIRTY CLUB

The Eighteenth Annual Dinner of the Thirty Club will be held at the Trocadero Restaurant on Saturday, October 7th.

Pass List

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

June, 1939.

Midwifery.

A. M. McCall
J. A. Sutton
W. E. Roden

ROYAL COLLEGE OF SURGEONS.

L.D.S.

June, 1939.

Surgery.

PART I.

K. S. Bacon
M. S. Barrada
E. R. Burt
W. F. Gibb
B. D. Clark
B. M. Cox
J. G. Hancock
R. F. Hoar
R. Howgate
R. L. Hurst
E. C. Lewis
F. T. J. Limpenny
J. A. Pearmund
J. O. Pierce
A. M. Pollard
J. H. Sarginson
J. H. Thomson
K. R. Titford
A. H. G. Trevanion
E. Weindling

Dental Surgery.

PART II.

M. S. Barrada
B. A. Bharucha
H. Brock
J. A. Dossor
L. M. Irwin
M. R. C. Kemp
A. Kinghorn
R. H. F. Pearce
K. R. D. Porter
T. N. Praat
G. G. G. Rees
H. Rees
E. W. Sleeman
G. M. Turner
E. Weindling
G. A. M. Whittall

Papers by Guy's Men

Hopkins, F. Gowland. The justification of the experimental investigation of cancer. *Med. Pr.*, 1939, cci, 609.

Zorab, E. C. An operative technique for retinal detachment. *Proc. Roy. Soc. Med.*, 1939, xxxii, 991 (Sect. Ophthal.).

Worster-Drought, C., and Another. Communicating hydrocephalus simulating cerebral tumour. *Ibid.*, 869 (Sect. Neurol.).

Denny-Brown, D. Myopathic weakness of quadriceps. *Ibid.*, 867.

Law, Frank. Foreign body free in the globe. *Ibid.*, 987 (Sect. Ophthal.).

Broster, L. R. Recent advances in the surgery of the suprarenal. *Med. Pr.*, 1939, cci, 583.

Rushton, Martin A. The birefringence of deciduous tooth enamel formed before and after birth. *Brit. Dent. J.*, 1939, lxvii, 1.

Ogilvie, W. H. Recent advances in surgery. *Clin. J.*, 1939, lxviii, 261.

Hopkins, F. Gowland. Importance of laboratory effort in cancer research. *Brit. Med. J.*, 1939, ii, 1.

Worster-Drought, C. Observations on persistent and recurrent headache with special reference to migraine. *Post-Grad. Med. J.*, 1939, xv, 258.

Marriages

LAMB—PEARCE.—On June 2nd, 1939, at the Church of St. Andrew-by-the-Wardrobe, Henry Douglas Lamb to Winifred Alice Pearce.

BORLAND—HOLLIDAY.—On June 24, 1939, by the Rev. E. G. Miles, M.A., and Rev. A. Herbert Gray, D.D., at St. Andrew's Presbyterian Church, Cheam, A. Keith Borland, M.R.C.S., L.R.C.P., of 1, Heathcroft Avenue, Sunbury-on-Thames, son of Mr. and Mrs. T. A. Borland, of Cheam, to Marjorie, elder daughter of Mr. and Mrs. H. H. Holliday, of Belmont, Surrey.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *29th July* 1939 — *Number* 1331

PASSIM

THIS month, Sir Arthur Hurst retired from his position as Senior Physician to the Hospital, and though happily he is still to hold his combined rounds on Tuesday afternoons, the Hospital's loss is nevertheless great. The combined round provides the best medical teaching that Guy's produces, and is almost the only example of post-graduate organised teaching in the Hospital, but Sir Arthur's great prestige as a Guy's teacher depends less upon this than upon his more private ward rounds, on which he has been accompanied by countless students who are now old Guy's men.

To one who has had no more exalted position on the Hurst firm than that of ward clerk, but who, for that reason, is speaking for the majority of those Guy's men who have had personal contact with Sir Arthur, the most striking impression left of those three months is the simplicity of his expositions. After hours spent in the evenings attempting to compete with the formidable list of facts required of one by the medical registrar, whether by means of the textbooks or by digging for symptoms and signs among the bewildered patients, the practice of medicine often enough seemed both difficult and aimless. But then, on his round on Tuesday and Friday afternoon came the moment when, after a brief questioning of the patient or a few sentences of explanation, one realised that it *could* all be made to fit together, that the matter one had previously assimilated lay heavy on the stomach only through lack of digestion, and that here was at once the stimulus and the example as to how the absorptive process was to be accomplished.

Here, one said, is that platonic simplicity that is the property of the great artist; that capacity to do a thing so supremely well as to make the onlooker believe for the moment that with a little effort he can do it too. Disillusionment was waiting if one failed to perceive the method, in one's admiration of the finished article. The immediate recognition of the essential factor in a problem, the building round it of the accessory factors so that each contributed its appropriate part to the co-ordination of the whole, and then the exposition of this intuitive process in clear, logical terms—these were accomplishments impossible to attain without wide experience and great practical and theoretical understanding. But it was an endless delight to watch and participate in, and one left a Hurst round with the feeling that medicine was not so meaningless or so arduous as one had thought; nor were one's own powers so wholly incapable of dealing with it, but, above all, one saw how absorbingly interesting it all was.

It is a quality of genius to make men better or more able by force of personality. Since civilisation began, men of genius have gathered round them schools of followers whom they have inspired by their teaching and example. We are to congratulate ourselves that at Guy's the Hurst school of medicine is not to be severed at one blow from its founder.

THE Royal College of Physicians has recently awarded the Moxon Medal to Sir Arthur Hurst. This Medal is given every three years to that medical man of any nationality who, in the opinion of the Selection Committee, has done most to advance the state of medical knowledge.

ON Thursday, July 13th, the Guy's Hospital Ladies' Association held their Fête in the Park. Professional activities were cut as short as possible on that afternoon, so that a number of residents and students were free to run the sideshows. Up to date the takings have been about

£800. Cash is still coming in, and the complete total will be given in the next issue.

The Millionth Morris Car, given to the Hospital by Lord Nuffield as the prize of a competition, has been won by Mr. John H. Wildman, a fourth-year student at Guy's. The car was presented to him by Captain Eric Waley, the Chairman of the Appeal Committee, in the Quadrangle on Tuesday, July 25th. Captain Waley has given the first year's tax on the car, which is a 1939 Morris "14." After the closing date of the competition it took three days to find the winner, and the members of the Appeal Office and their voluntary helpers who sorted the tickets deserve notice for their unselfish labour. Some 40,000 tickets were sent in, and the cash so far received is £1,600.

Other news of the Fête is given in a letter in this issue from Dr. Ryffel, and we also publish two pages of photographs taken at it. They should need no comment or explanation to any Guy's man.

THE first correct solution of our first crossword puzzle arrived at the office on the Monday morning after publication. It is fair to add that it was preceded by two others which were wrong in one particular only, and that the same one. Of the ten correct solutions sent in, all arrived in the first week. Was the puzzle then too easy? If our agile-witted readers would like harder stuff to try their brains on, we might be able to procure it. Only let them say what they would prefer. And another thing: Is it fairer to give the hard-earned prize to the man working against time, and thus benefit those living in or near the Hospital, or to put all the correct answers in a hat and pick out one? We need your help in finding an answer to these questions, so give us your suggestions.

A Note on Sir Arthur Hurst's Contributions to Medical Science and Literature

By J. A. R.

AMONG the components of genius may be included an unlimited capacity for work and the happy gift of inspiring others. In the annals of Guy's it would be hard to find a rival for Arthur Hurst in respect of either of these qualities. History may accord a prior place for their special discoveries and distinctions to Bright, Addison, Gull, Wilks or Sir Astley Cooper, but it may be doubted whether any other Guy's man has contributed so largely as Hurst to medical science and literature or has given such constant encouragement to like activities in his associates.

No attempt will be made here to provide a bibliography of his writings. It would occupy too many pages of the *Gazette*, and it is the hope and belief of all of us that it will not be completed for many years to come. In a man who shows such little evidence of growing old we may well surmise that productivity of thought and pen will not at first be diminished by retirement.

In grouping Hurst's medical and sientific contributions we may consider the main interests and also the main periods of his career. He has been in turn physiologist, physician, neurologist and psychiatrist, and—although it is a name which we dislike in this country—the world holds him, perhaps, in highest regard of all as a gastro-enterologist. With a twinkle in his eye some of us have also heard him lay claim to the title of cardiologist, for, in conjunction with G. W. Goodhart, he described, with polygraphic tracings, the first case of auricular flutter in a paper entitled "The Speed Limit of the Human Heart" (*Q.J.M.*, 1908-9, ii, 214).*

In his insistence on the importance of psychiatric treatment in hyperemesis gravidarum he made an outstanding contribution to obstetric medicine.

Before his swift rise to distinction as a physician, his work was mainly in the physiological field, and his early training and the inspiration of the Oxford school have clearly influenced his clinical thought and researches ever since. Here we note a departure from the older traditions of Guy's which, with their firm basis in morbid anatomy, had for about a century encouraged the study of structure rather than function. Hurst, however, would be the first to allow the continuing importance of morbid anatomy and to insist that physiological methods have supplemented but not replaced clinical and pathological inquiry. There could be no better expressions of this attitude than his

* It was not recorded in this paper that on one occasion when the authors were taking tracings a heavy-footed nurse repeatedly disturbed the mechanism of the polygraph. The quick resource of A. F. H., however, solved the difficulty when she finally departed into the linen room and he sped like lightning down the ward and locked her in, there to remain until the observations were finished.

Photo by Vandyke

SIR ARTHUR HURST, D.M., F.R.C.P.

warm regard for the work of Adrian Stokes and G. W. Nicholson and his intimate collaborations with Matthew Stewart and F. A. Knott. In 1911 he gave his Goulstonian Lectures on " The Sensibility of the Alimentary Canal." In the preparatory work for these and for his studies of the motility of the digestive tract his student associates included F. Cook, E. G. Slesinger, G. Marshall and H. W. Barber. The lectures were later published in book form.

Before the War, neurology claimed much of Hurst's attention, and he was the first chief of the neurological out-patient clinic at Guy's. The war period stirred him to varied activities in Salonika and at home and resulted in a book on " Medical Diseases of the War " and the inauguration of his famous unit at Seale Hayne, where he and his colleagues (including W. R. Reynell, J. F. Venables, C. H. Ripman, J. L. Symns and W. Johnson) made an extensive study of the psycho-pathology and treatment of the war-neuroses.

Since the War his main interests have been in the field of gastro-enterology, and in asthma and the anæmias. His recognition of subacute combined degeneration of the cord as having a constant relationship with pernicious anæmia and with the same underlying gastric pathology attracted particular attention.

Of his works published in book form the following call for special mention. Some of them, and especially those dealing with constipation and peptic ulcer, will remain classics, but every one of them is rich with information, original ideas and clear records of his intensive methods of investigation :—

1. " Constipation and Allied Intestinal Disorders," 1909. (Republished with additions and alterations in 1919.)

2. " The Psychology of the Special Senses " (being the Croonian Lectures of the Royal College of Physicians), 1920.

3. " Medical Essays and Addresses," 1924. (A collection of many of his contributions to the journals on gastro-intestinal disease, Addison's anæmia, asthma, and the hysterical element in organic disease).

4. " Gastric and Duodenal Ulcer " (with Matthew J. Stewart and P. J. Briggs), 1929.

5. " The Constitutional Factor in Disease," 1927.

In all his writings Hurst has made generous references to his co-workers, whether in the Department of Physiology or the wards at Guy's, in war hospitals, or at New Lodge Clinic. I know that I shall be voicing the opinion of each one of these when I take the present opportunity of thanking him for the many privileges we enjoyed as his collaborators and for the stimulus and kind encouragement he so freely gave us when we proceeded to observations, experiments and writings of our own.

Since the War Hurst has identified himself, as Editor of the *Guy's Hospital Reports*, with all the research activities of the Hospital. In 1921, the Reports became a quarterly journal instead of an annual volume. In the eighteen years which have since elapsed there have been only two volumes which have not included one or more papers by Hurst himself or written in conjunction with colleagues or juniors. Many volumes have included three or four, and one as many as eight, papers from his pen. This arduous editorship has been a labour of love. It has kept high the tradition of clinical medicine at Guy's and has been the medium of friendly relationships between Guy's men and colleagues in other schools and other lands. It has given to many young men the opportunity of embarking upon and writing up their first piece of original work and the inestimable advantages, too, of wise pruning and literary correction. Many contributions of outstanding importance, some excellent symposia, and historical papers by Sir William Hale-White and others have brought distinction to the Reports since 1921, and I doubt whether any other hospital in the world can boast such a bountiful yearly harvest of clinical and scientific papers.

It would be invidious and take too long to pursue here the work of others who have owed their interest and achievements in large part to Hurst's stimulating personality and advice. Few members of the Staff in the last quarter of a century have wholly escaped his influence. His lectures and addresses and letters to the journals both in England and abroad have often been provocative as well as novel and instructive, but provocative in the best sense, for whether in agreement or disagreement they have set men thinking. No one has shown himself more willing to change his views when an earlier pronouncement became no longer tenable. When asked for reprints he has confessed to a feeling that they always seemed to him out of date. " I like," he says in a preface, " to believe that this is evidence of the scientific spirit, which is never content to leave a question as settled, but is always ready to modify views, however strongly held, in the light of further evidence." In his ways and works he is certainly the perpetual student, and what good fun it has been for us all to be students with him.

Sir Arthur Hurst—An Appreciation

By H. C. Cameron, Esq., M.D.

I HAVE been asked to write something in the way of a personal note on Sir Arthur Hurst. When I came to the College in January, 1903, Hurst was the first person to call on me. Incidentally this meeting very nearly induced me to give up the attempt to be a doctor. I suppose, having just entered the wards, I was suffering from a somewhat exaggerated sense of the vastness and difficulty of the task I had undertaken, and I mistook Hurst for an ordinary and average student. He was at that time, I think, just completing his dressership with Mr. Jacobson, and the amount that he had learnt in that short time and his familiarity with all the problems discussed in the wards filled me with dismay. He showed me his notebooks, loose notes bound together, each page a digest of his reading. When he encountered anything newer and better, the old note was discarded, and the new took its place. It was only a growing familiarity with the work of others of my contemporaries that restored to me sufficient self-confidence to convince me that I might carry on. All of us indeed placed Hurst in a class by himself, and were content to pit ourselves against the rest.

Someone has said that there are three sorts of intellect arranged in a sort of crescendo—that which absorbs light, that which reflects light, and that which emits light. Hurst, I think, in unusual measure has all three. Even in those days he not only amassed a great store of learning from the literature of medicine with ease and quickness, but what he learnt was always to him a new point from which speculation and investigation might start. If then, as now, like a good hound he sometimes followed the wrong trail for a time, recantation and his return to the head of the pack was never long delayed. An early instance of his power of adapting a new method of investigation to eminently practical and profitable aims was shown in his use of the opaque meal to study the movements of the alimentary canal and constipation in particular. Cannon had used this method in investigating the stomach movements in cats. At that time I was writing a thesis on the digestion of persons upon whom the then comparatively new operation of gastro-jejunostomy had been performed. Hurst suggested to me that I should use pellets of bismuth to ascertain whether the exit from the stomach was by the stoma or by the pylorus. I may be wrong, but my recollection is that it was from this beginning that he developed his method of outlining the whole alimentary canal, which he demonstrated before a very large and interested audience at one of the last meetings held at Hanover Square before the Royal Society of Medicine moved to Wimpole Street.

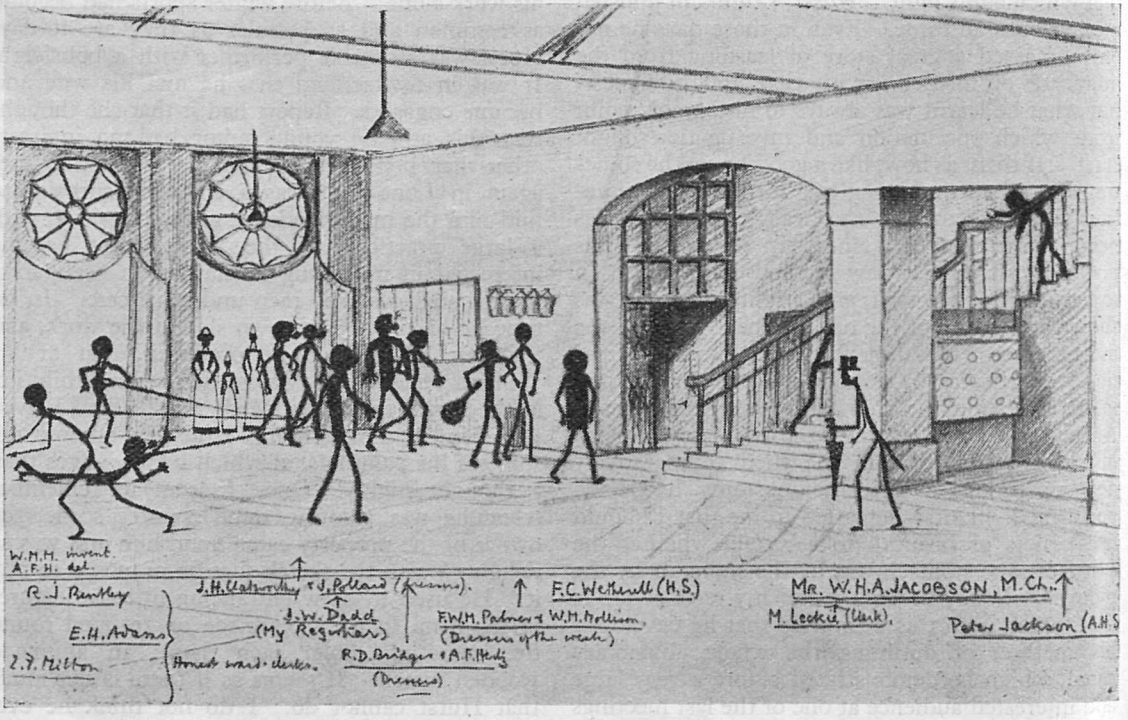
Hurst was elected to the Staff at the early age of 27. Like Beddard he passed straight from being Demonstrator of Physiology and never served as Registrar. There were those at the time who thought this was a misfortune to him. If it was so, it was one that he quickly overcame, and although then, as now, there was much in medicine that had little interest for him, in the many things in which he was interested his reputation soon passed far beyond the walls of Guy's. Almost at a stroke he attained to a foremost position as a consultant. For a time he shared the Warden's House with Mollison, and a little later it was my good fortune to be admitted as a third to the party. But he soon moved to rooms in Weymouth Street, visiting the Hospital in one of the early motor cars, which he drove himself with much more confidence than circumspection. In those days his health seemed at any rate sufficient to stand up to the tremendous energy with which he lived his life. It was only later, after the War, that it was considered wise for him—or perhaps it was his own wish—to give up practice in the ordinary sense and to devote himself to Guy's and to New Lodge.

Hurst's interests have never been confined to his work alone. Before winter sports had become as common and as popular as they are to-day, Hurst was a notable performer with a bobsleigh. It was in Switzerland that he met his wife and became engaged. Report had it that she thought that this athletic young suitor had no interests other than bobsleighing, and that when they met again in London it was a complete surprise to find him the man of science and a physician with a large practice. In the War, Hurst became interested in modelling in clay as an occupation for the shell-shocked men under his care. In no time he had shown his own skill at the work, and the first bust which he produced, that of Sir William Hale-White, was shown at an exhibition at the Royal Society of Medicine. When I lived with him in the Warden's House he showed me some of his paintings, of which better judges than I thought highly. Once I seem to remember when he was painting some country scene, the owner of the property came upon him and was so delighted with the sketch that he proposed to buy it. He used to draw entrancing little caricatures of his firm, in the Colonnade or grouped round the operating table, each figure an animated wooden match. It seems as if there is not much that Hurst cannot do. I do not think he ever

played a musical instrument, but in the Warden's House Mollison had his violin. Hurst took it up once or twice for a little, and I remember that I had the feeling that he was inevitably about to become a great musician.

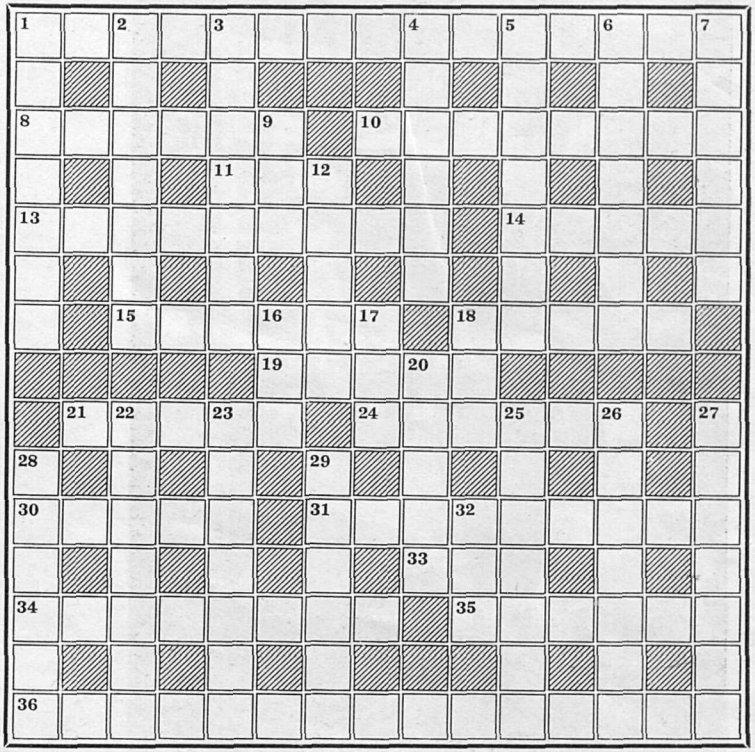
No one of us has changed less than Hurst. Take away a little of his asthma and all his deafness and you have him as he was. Compared with his grey-haired contemporaries he still looks like a boy, sometimes perhaps like a rather tired boy who has been overdoing things a little, but still like a boy. Anyone or anything that appeals to him brings a rush of animation and an arousing interest which shows in a smile that is quite characteristic. And he is interested in most people. It is not because of any self-imposed determination that Hurst is so insistent to acknowledge in his published works the help that he has received from others, or to make reference to even the most junior assistant in a combined piece of research. It is characteristic of him to transfer his own interests and enthusiasms to others, and then to be genuinely appreciative of their response. It is this that has made him, despite the limitation of the range in which he moves, one of the greatest teachers in the history of our school at Guy's. It is this that has made him again and again take endless trouble to secure the promotion and to forward the interests of those who have gained his confidence. He believes in others as he believes in himself. Most of his students and assistants are to him swans, with only a very occasional

goose. It would be strange if so big a man, with so great a heart, had not been both a most sought-after teacher and a well-loved chief.



A Drawing made by Sir Arthur when a dresser on Mr. Jacobson's Firm

Crossword No. 2



ACROSS

1. Continued diarrhœa ? (2 words, 9 and 6).
8. Medicinal herb, easy to find.
10. Refunded. (Anag.)
11. Period.
13. Describes a notch.
14. Long, round, muscle.
15. Nauseous substance.
18. (Rev.) Would this perplex the maker of prostheses ?
19. Motor nerve to eyeball.
21. Its strings should be cut early in life.
24. Salt-freed ?
30. Auricle.
31. Double diplopia ?
33. Take in.
34. Hair tics lead to this disease.
35. Water-way.
36. .. (2 words, 10 and 5.)

DOWN

1. Supporting structure.
2. Sounds a queer time of life to look around.
3. N
4. Result of being out of sight ?
5. Guards the inner man.
6. May be red or white.
7. Mix in dust.
9. Self-expression.
12. The mixture is moral before ninety-nine.
16. Fashionable measure.
17. Draw blood in old-fashioned way.
18. (Rev.) Position of head, in short.
20. Sordid profit.
22. Universal remedy.
23. They atrophy with age, yet nothing alters structurally.
25. Performed by dental anæsthetist ? Well, almost !
26. Describes fossa.
27. Old-timer started as horse-doctor.
28. Ghostly stimulant.
29. Cold room ?

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 8th August.

A Prize of 5s. is offered for the first correct solution to be received.

Winner of Crossword No. 1: F. R. C. Manning, Guy's Hospital

SOLUTION No. 1

■	E	X	P	E	C	T	O	R	A	T	I	O	N	■
■	N	■	E	■	O	■	■	L	■	R	■	O	■	■
M	E	L	A	E	N	A	■	R	I	P	O	S	T	E
■	M	O	U	L	D	■	C	■	B	A	N	T	I	■
S	A	C	■	D	Y	N	A	M	I	C	■	E	O	S
■	T	O	M	E	■	■	T	■	■	K	E	E	N	■
H	A	M	■	R	E	M	A	N	D	S	■	L	S	A
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F	I	T	■	H	U	M	A	N	E	R	■	E	P	I
■	C	I	T	E	S	■	C	A	T	A	R	R	H	■
S	E	V	E	R	■	S	T	Y	■	D	E	V	A	L
■	B	E	T	E	L	■	S	■	R	I	D	E	R	■
W	A	S	H	O	U	T	■	H	A	I	R	D	Y	E
■	G	■	E	■	S	■	■	■	T	■	A	■	N	■
■	S	T	R	E	T	C	H	R	E	F	L	E	X	■

GUY'S GARDEN FETE

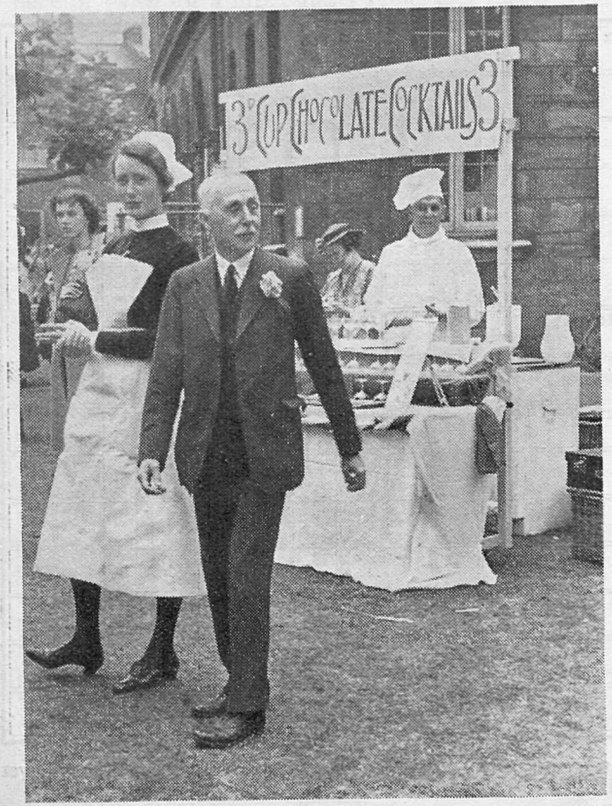
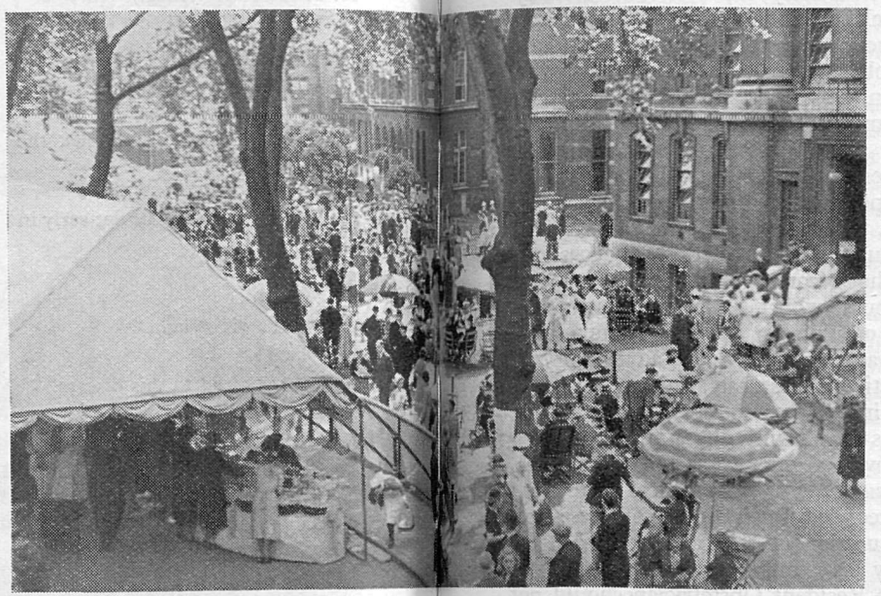


Photo by Miss Barwell



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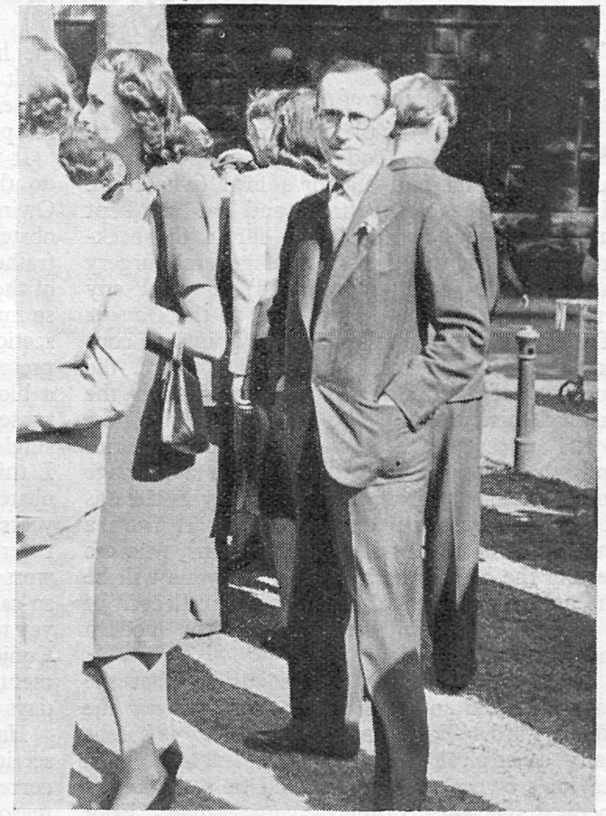

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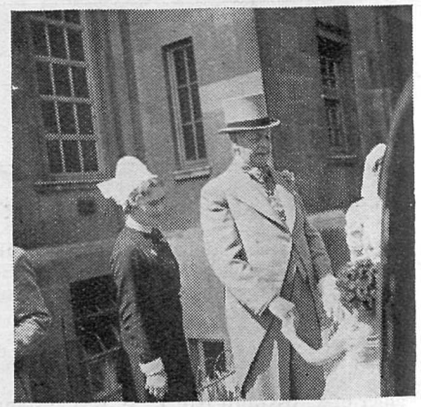
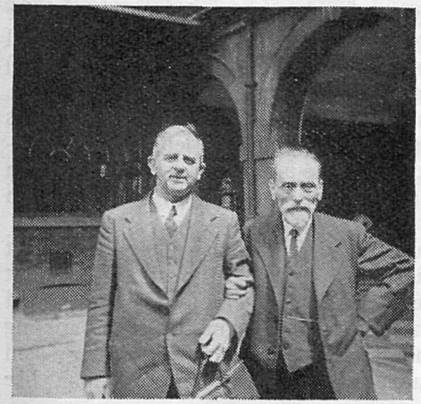




Photos by T. H. Eustace

Correspondence

The Cleavage of Obstetrics & Gynæcology

To the Editor of the GAZETTE

SIR,—It is always a pleasure for any old student who had the good forture to work as a dresser on Mr. Layton's firm (where the diseases of the nose, throat and ear are kept sufficiently—and appropriately—far in the background so that the principles of general surgery may be adequately adumbrated) to read any written word of his. In his letter to the *Gazette* of the 15th July he raises several points of considerable interest, and in particular to me the question of the position of Obstetrics in the medical curriculum.

His advocacy of a cleavage between obstetrics and gynæcology is opportune. Such a cleavage will undoubtedly come in this country in time as it has already come abroad, and, apart from a handful of financially interested persons, who are getting the best of both worlds, everyone will be the gainer—in particular the poor shuttlecock of a patient, so seldom considered in the modern medical Wonderland.

It has always struck me as curious that the path to consultant gynæcology should be *via* the labour ward. To my mind gynæcology is essentially a surgical speciality, comparable to Mr. Layton's own; obstetrics should be essentially a medical speciality, primarily conservative. Prior to the Great War the obstetrician was known as a physician-accoucheur; to-day he calls himself an obstetric surgeon—almost a contradiction. But even the illogical English mind can usually be made to appreciate a situation when it is repeatedly presented, and Mr. Layton is adding his voice to what I imagine is a fairly considerable undercurrent.

To be constructive: I have the following ideas to put forward—I am presuming a cleavage will come between obstetrics and gynæcology. The training for obstetrics will become essentially medical, with the M.R.C.P. as the qualifying examination (as it is to-day in Dublin). Major obstetrics will be carried out by *full-time resident obstetricians*; suitable married quarters will, of course, be provided in the maternity hospitals. The present relatively unsatisfactory system, whereby relatively junior residents do the bulk of the major obstetric work unsupervised (unlike the Guy's system), will gradually disappear. The Resident Obstetrician will receive a salary sufficient to attract the best type of man, *and* will be allowed to conduct private obstetric practice in the hospital. Emergency work outside will be dealt with by a "Flying Squad." As a guide the present staffing arrangements at the Rotunda Hospital seem to be satisfactory.

It will be asked, of course, "Who is going to do the Cæsarean sections in such a Utopia?" Owing to the essentially conservative and truly obstetric outlook of the Resident Obstetrician (rather than the expedient and surgical outlook of the modern obstetrician-cum-gynæcologist with so many irons in the fire) the number of Cæsarean sections will diminish to perhaps one-third of the present figures. The increasing Cæsarean rate is a blot on modern obstetrics, and as long as the present system persists it will worsen. The largest single factor in this regrettable state of affairs is, I think, the surgical outlook of the occasional obstetrician, who becomes more occasional with years and honours, whilst becoming increasingly revered as an opinion on delayed labour—and, worse still, as an opinion on the advisability of so-called "elective" Cæsarean section. (It is not yet ten years since I was roundly abused in the Conjoint Finals for having the impertinence to mention the lower segment operation—in those days I was not *au fait* with geographical obstetrics.)

Having so reduced the number of Cæsarean sections, the question of the operation becomes correspondingly less important, and I see no reason why the Resident Obstetrician should not be competent to perform the operation. No greater surgical skill is required than in the satisfactory repair of a third degree tear, which will remain in his province, and in any case the important thing is the decision when a Cæsarean section is necessary; once the decision is made the nearest available person familiar with the technique can be called upon to do the operation. I think it is time to call a halt to the existing ridiculous system whereby a man is encouraged (or rather forced) to spend many years in the obstetrical Grub Street in order finally to reach the gilded (?) heights of a Harley Street gynæcological practice. The shades of Smellie must oft shudder to see his beloved obstetrics utilised as a leman, to be discarded when the time is ripe, and at a time when experience and judgment of some value have been attained.

Now let us turn to the training of a gynæcologist—and I mean the strictly surgical gynæcologist and not the specialist, so common in France and styling himself a *medical* gynæcologist (dabbling in dermatology, endocrinology, venerealogy and electrotherapeutics), but the type of man like

Professor Gaston Cotte, of Lyon; a surgeon who has finally specialised in gynæcology and who has a professorial gynæcological unit in the University, and who restricts himself to gynæcology, to the exclusion of obstetrics. In my many visits abroad I have encountered no higher standard of gynæcological practice than is found in his unit.

The initial step after qualifying should be the ordinary house-surgeon appointments, followed by at least six months as an obstetric resident (in view of the necessity for familiarity with the sister speciality); then a surgical fellowship is necessary (indicative solely of academic ability), followed by *at least one year* as a Resident Surgical Officer. During this appointment familiarity is obtained in all types of general surgical techniques. Next should come the Registrar or First Assistant appointment on a *Gynæcological Unit*. During this phase cystoscopic technique should be mastered—it is surprising how often cystoscopy is indicated in the course of gynæcological diagnosis, and only too frequently omitted in this country owing to the reluctance of gynæcologists (or can it be the inability?) to cystoscope their patients. If the intending gynæcologist wishes to include the radium treatment of uterine malignancy in his armamentarium it would seem desirable that some months as least were spent in acquiring an understanding of the principles involved and a familiarity with the standard techniques—not to mention a knowledge of the diagnosis, treatment and prophylaxis of the commoner complications of radiotherapy.

Pari passu our First Assistant is becoming familiar with routine gynæcological diagnostic and operative procedure, until after two or three more years he is duly fledged as a young consultant—in my opinion equipped primarily as an abdomino-pelvic surgeon, a surgical specialist quite comparable to the oto-rhino-laryngologist.

To my mind it is a matter of some concern that there is a tendency to limit gynæcology to strictly "vaginal" bounds rather than pelvic. Even more regrettable is the attitude of those schools which still refuse to regard a surgical training as a *sine qua non* prior to gynæcological specialisation. It is no wonder that the gynæcological surgeon is regarded somewhat sceptically by his surgical colleagues—his graduation through obstetrics being rightly suspect—and I think he will only take his rightful place when the cleavage advocated by Mr. Layton comes about, and gynæcology becomes a true surgical speciality.

Yours, etc.,

T. F. TODD.

24*a*, St. John Street,
Manchester, 3.

Post-Graduate Instruction

To the Editor of the GAZETTE

SIR,—I welcome Mr. Layton's timely letter on the above subject, the importance of which was recognised by the Medical Education Committee of the B.M.A., which recommended "a period of practical responsibility under suitable supervision as one of the major changes" (in the curriculum). The need for such instruction is beyond argument, but how the recommendation is to be "implemented" (blessed word!) is quite another matter.

May I refer your readers, including Mr. Layton, to an article of mine in the *Gazette* for August 17th, 1935, entitled "Back to Apprenticeship," which received notice in the *British Medical Journal*?

I am one of the fortunate individuals—as I count myself—who, although born many years after the abolition of apprenticeship, can speak from personal experience of its benefits; thanks to a very shrewd and far-seeing father, who decreed that because of my youth—I was 16½ at the time—I should spend a period of nearly a year as the "pupil" of a very distinguished Guy's man on the staff of a large provincial hospital. I have never ceased to look back with gratitude on those crowded months. It would require too much space to outline in detail the instruction I received in that period. Most of all I retain a feeling of gratitude for the practical experience I gained as to the importance of physiology (including biochemistry) as the foundation upon which a knowledge of medicine and pathology should be built, and of a knowledge of materia medica and the principles underlying their employment in the treatment of disease (*vide* "Materia Medica and All That," *Guy's Hospital Gazette*).

The danger to the public and the risk to the career of a newly-qualified medical man who is turned loose upon the public *ab ovo* may not be realised by the gentleman himself at the time, but it is very real.

When I passed my Final and my name appeared on the Register I felt that there was nothing in the realms of medicine, surgery or midwifery to which my skill and erudition was not equal. The practical instruction which was ours at Guy's under the old regime certainly gave us confidence. Two months after I qualified, this confidence enabled me to tackle successfully an acute mastoid in the back bedroom of a country cottage with an old chest of drawers for an operating table and a domestic saucepan for a steriliser, thanks to the teaching of Jacobson! I was very lucky; luckier than I was subsequently, when I essayed the removal of enormous uterine fibroids from another patient.

I would divide post-graduate instruction into two stages. The first stage would be subsequent to passing the Final examination and before registration. This period should perferably last three months, but even one month would be better than nothing. It could be spent either holding a junior hospital appointment, or for those for whom such appointments are not available as a period of instruction with an " approved " practitioner, on the lines of a specified syllabus.

This would assist the novitiate to some extent to decide as to his future bent.

The second stage would be taken at any time subsequent to registration. If the newly-qualified man decides to specialise he would take a course leading to one of the special diplomas or higher qualifications. In some cases this could be done whilst holding resident medical or surgical appointments.

The only special diploma registrable at present is the D.P.H. This might be obviated by the institution of a " Specialist Register."

When Mr. Layton stresses the importance of a knowledge of the patient, he is absolutely right. Even men who are temperamentally suited to the practice of medicine sometimes form an inaccurate appreciation of a difficult patient which may prejudice their handling of the case. Those who enter the profession of medicine from mercenary or other unworthy motives are perhaps less inclined to take the patient, *qua* patient, into consideration.

In conclusion let us remember the young Scottish minister who was walking home from the kirk with his aunt after preaching his first sermon.

" Why did you enter the meenistry, Sandy ? " asked the aunt.

" Because I was called, auntie," answered the young divine loftily.

After a pause the old lady asked, " Are ye sure it wisna' some ither noise ye heard, Sandy ? "

If a man mistakes " some ither noise " for the " call " to medicine, no amount of post-graduate instruction will make him into a real " doctor."

Yours, etc.,

" STANLEY."

Justification for Knavery

To the Editor of the GAZETTE

SIR,—It is fair to assume that whoever is responsible for the Universe must also approve of the principle of the survival of the fittest types. The struggle for existence has always been as keen among men as among the brutes, but with the advent of the refugee the battle is intensified, and there is no room for sentiment in this presumably God-engineered conflict.

For many of these aliens bring to bear on the problems of living an unscrupulousness that leaves the average trustful Englishman high and dry. My last Jewish patient, for instance, had an hundred per cent. British name and a ninety per cent. fictitious address on his visiting card—and the optician who dispensed his glasses fared no better.

The foreign infiltration will spread, for not only do eminent doctors with incomes secure from their inroads advocate the admission of more and more Jews, but the jolly little chaps are being rowed ashore from steamers all round the coast, some areas on fine nights resembling Henley Regatta.

With this inevitably increasing permeation by aliens of all branches of non-manual work, I suggest that, unless the Briton becomes sharper in the worst sense of the word, he will disappear off the face of the earth—unless, perhaps, as the ants keep their aphis to milk, so will the foreigners preserve a few Gentiles.

I should therefore like to see Guy's start the propaganda for the proper goose (the medical profession) by establishing a Professorship of Medical Unethics. Such a Chair would help doctors to become hocus-pocus-minded and bamboozle-conscious, carrying on the tradition of the late hospital official whose ambition it was to make the youth of Briton beer-minded. Surely no man of goodwill, not even excluding any Christian thoughtful enough to believe in Darwin, could disapprove of any effort to render the native race fitter to face the struggle to survive.

Yours, etc.,

O. HAL.

Blood Transfusion

To the Editor of the GAZETTE

SIR,—During the past three weeks a campaign has been in progress to enrol volunteers who would be blood donors in time of war. The collection of blood for " grouping " has been done almost exclusively by students, and of the fifty-one centres in London, nine were conducted by Guy's men.

I would like to express my gratitude to those students who have so ably carried out these duties, and to say a word of praise for the admirable manner in which they adapted themselves to the varying conditions. During the first week, when volunteers were as scarce as frost-bite on the Gold Coast, I found Guy's men wearing out their natal eminences with a cheerfulness that defies description. Some of them had travelled as far as

Dartford, but in spite of this there were never any signs of rebellion. In the second week, when the population had been stimulated by Commander (Strychnine) King-Hall, the large number of volunteers were dealt with rapidly and efficiently by those previously enduring an enforced idleness. I know that these students have done much to enhance the reputation of Guy's at all the hospitals they worked at. I would like to say to them, "Well done!"

Through this campaign, a powerful weapon of civil defence has been created, and, though we hope it will never need to be used, I should like to sound a word of warning to those who may be called upon to handle this weapon, because, like all other armaments, it has its own inherent dangers.

I have always maintained, and tried to teach, that blood transfusion is not a procedure lightly to be undertaken, because even in the comparative quiet of hospital practice, with grouping, cross-grouping and preliminary administration of alkalies, catastrophes are not unknown. In war time none of these preliminaries will be possible, and "Group O" blood will be transfused indiscriminately.

I do not wish to go into any details, but it must be obvious that certain risks will have to be taken. My fear is that the plethora of blood made available is likely to lead to unnecessary transfusions, almost as a routine procedure. Let us not forget that in some cases saline and gum saline may be just as good and much less dangerous. If this warning is not heeded, I believe the humble physician will have unprecedented opportunities for studying those interesting phenomena of hæmolytic jaundice and suppression of urine.

Yours, etc.,

N. M. JACOBY.

Guy's Hospital,
S.E.1.

The Fete Competitions

To the Editor of the GAZETTE

SIR,—As many readers of the *Gazette* were interested, I venture to send you the results of the watch-card competition and other raffles held in connection with the Fête on July 13th. The winner of the watch was Mrs. Thorpe, of Hove, a former Guy's nurse, who attended the Fête and says she is delighted with her luck in winning.

The Panda was won by Miss Bridget Adams, Regent's Park, who presented it at once to the Baby Ward. The tenants thereof, present and to come, ought to be delighted.

Other raffles were won by Mrs. McFall, Eltham; Mrs. Foxley, Streatham; Nurse Vincent, Guy's; Dr. Conybeare, Dr. Koerner and Dr. Waterfield. There is one raffle not yet completed. As to financial results, the account is not yet complete, but the net amount ought to be in the neighbourhood of £200.

Yours, etc.,

J. H. RYFFEL.

Guy's Hospital, S.E.1.

The Wills Library

To the Editor of the GAZETTE

SIR,—Overcrowding of the Wills Library necessitates an extra reading-room to make enough space for those who use it as a reference library. The Library is a necessity to anyone at Guy's who would "get up" a specialised subject. Its value in this would be enhanced by the open-shelf system, but there is then the danger of losing or having defaced valuable specialised books.

Yours, etc.,

GEORGE R. W. N. LUNTZ.

Guy's Hospital,
S.E.1.

Hospital Appointments

MEDICAL SCHOOL

THE following appointments and reappointments have been made by the School Council for the period commencing 1st October, 1939:—

Medical Registrars—

Dr. E. B. French, appointed for two years.
Dr. D. N. Leeming, appointed for two years.

Resident Surgical Officers and Registrars—

Mr. W. G. Gill, reappointed for one year.
Mr. F. R. Kilpatrick, reappointed for one year.
Mr. J. E. Spalding, reappointed for one year.
Mr. S. H. Wass, reappointed for one year.

Clinical Tutor in Charge of the Preliminary Period Class—

Dr. W. N. Mann, appointed for two years.

Obstetric Assistant—

Mr. J. B. Blaikley, reappointed for one year.

Obstetric Registrar—

Mr. H. A. Hamilton, reappointed for one year.

Assistant to the Guy's Hospital Clinical Research Fellow—

Mr. J. R. Forbes, reappointed for one year.

Demonstrator of Anatomy, Whole-time—
Mr. H. R. S. Harley, reappointed for one year.

Demonstrator of Anatomy, Part-time—
Mr. P. W. Clarkson, reappointed for one year.

Chief Clinical Assistant and Registrar in the Dermatological Department—
Dr. W. G. Tillmann, appointed for two years.

Demonstrator of Pathology with Charge of the Clinical Laboratory—
Dr. R. L. Waterfield, reappointed for one year.

Gull Student of Pathology—
Dr. S. de Navasquez, reappointed for one year.

Demonstrator of Pathology, Whole-time—
Dr. S. de Navasquez, reappointed for one year.

Demonstrator of Pathology, Part-time—
Dr. S. J. Hopkins, reappointed for one year.

Griffiths' Demonstrator of Pathology—
Dr. C. Colbeck, reappointed for one year.

Anderson Demonstrator of Clinical Chemistry—
Dr. M. Lubran, reappointed for one year.

Demonstrators of Physiology, Part-time—
Dr. J. M. Brown, reappointed for one year.
Dr. M. Lubran, reappointed for one year.
Dr. J. M. McArthur, appointed for two years.

Demonstrator of Chemistry, Whole-time—
Dr. B. Levin, reappointed for one year.

Demonstrator of Chemistry, Part-time, and Assistant Lecturer in Dental Metallurgy—
Mr. S. Holt, reappointed for one year.

Demonstrator of Physics, Whole-time—
Dr. A. C. R. Wakeman, reappointed for one year.

Demonstrator of Physics, Part-time—
Mr. C. W. Wilson, reappointed for one year.

Demonstrators of Biology, Whole-time—
Mr. E. W. Baxter, reappointed for one year.
Mr. J. S. Wilkie, reappointed for one year.

Demonstrator of Biology, Part-time—
Mr. F. J. Aumonier, reappointed for one year.

DENTAL SCHOOL

THE following appointments and reappointments have been made by the School Council for the period commencing 1st October, 1939 :—

Half-time Assistant to the Director of the Conservation Room—
Mr. F. L. Ingram, appointed for one year.

Half-time Assistant to the Director of the Dental Prosthetic Laboratory—
Mr. H. C. Davis, reappointed for one year.

Administrative Dental Officer—
Mr. G. S. Loader, reappointed for one year.

Registrars in the Dental Department for Children—
Mr. K. E. Pringle, reappointed for one year.
Mr. G. J. Parfitt, appointed for one year.

Demonstrators of Operative Dental Surgery, Morning Attendance—
Mr. C. S. Pitt, reappointed for one year.
Mr. R. O. Holland, appointed for one year.
Mr. W. A. Vale, reappointed for one year.
Mr. R. F. Pusey, reappointed for one year.
Mr. J. C. Robertson, appointed for one year.
Mr. A. E. Parrott, reappointed for one year.

Demonstrators of Operative Dental Surgery, Afternoon Attendance—
Mr. H. H. Kenshole, reappointed for one year.
Mr. A. R. F. Thompson, reappointed for one year.

Demonstrators of Dental Prosthetics—
Mr. K. P. Liddelow, appointed for one year.
Mr. R. J. Wheatley, reappointed for one year.
Mr. J. W. Mansie, reappointed for one year.
Mr. G. H. Ellingham, reappointed for one year.

Assistant Bacteriologist, Dental—
Mr. C. W. T. Shuttleworth, reappointed for one year.

Demonstrator of Dental Bacteriology—
Mr. C. S. Henderson, reappointed for one year.

Demonstrator of Dental Histology—
Mr. J. W. Mansie, reappointed for one year.

Assistant Curator to the Dental Section of the Gordon Museum—
Mr. A. R. F. Thompson, reappointed for one year.

Sport

Golf

GUY'S *v.* SIDCUP GOLF CLUB

GUY'S beat the Sidcup Golf Club by 5½ matches to 2½. The course at Sidcup was playing very well after the recent rain, and the Guy's golfers seemed to take full advantage of this in gaining a substantial victory.

We were entertained to a very enjoyable supper afterwards by the Sidcup Club.

Results were as follows :—

Guy's		*Sidcup*	
J. C. Ritchie (1 up)	1	G. W. Cattermole	0
J. W. R. Drury (4/3)	1	C. Stewart	0
W. James (3/2)	1	J. J. Lambert	0
J. G. Mathewson (4/3)	1	R. Wenton	0
W. G. Cross	0	W. P. Taylor (3/2)	1
J. S. Breen Turner	0	J. Hiscock (1 up)	1
R. Wadia (6/5)	1	W. M. Wilson	0
M. J. Trott	½	A. J. Barnes	½
Total	5½	Total	2½

DENTAL STAFF *v.* STUDENTS

THE Dental Staff match was played at Chislehurst on Wednesday, 28th June, and resulted in a victory for the students by 6½ matches to 3½.

The course at Chislehurst was in excellent condition and the golf in some of the matches reached a very high standard.

A large crowd gathered on the first tee to cheer the players on their way.

There was much speculation as to the result of some of the matches, as it was rumoured that "one member" of the Staff had been shooting "eagles" in practice rounds.

We should like to express our sincere thanks to the members of the Staff who entertained us so well.

Results were as follows :—

Staff		*Students*	
Mr. Bulleid & Mr. Hooper	0	Praat & Ritchie (4/3)	1
Mr. Pitt & Mr. Parrott (2/1)	1	McCallin & Dossor	0
Mr. Mansie & Mr. Wheatley	0	Cross & Stuart-Smith (6/5)	1
Mr. Loader & Mr. Davis (5/4)	1	Flitcroft & Fletcher	0
Mr. Henderson & Mr. McConnell	0	Malleson & Plowman (7/5)	1
Mr. Pitt & Mr. Parrott	0	Praat & Ritchie (5/4)	1
Mr. Bulleid & Mr. Hooper (3/2)	1	McCallin & Dossor	0
Mr. Henderson & Mr. McConnell	½	Cross & Stewart-Smith	½
Mr. Loader & Mr. Davis	0	Malleson & Plowman (5/3)	1
Mr. Mansie & Mr. Wheatley	0	Flitcroft & Fletcher (3/2)	1
Total	3½	Total	6½

GUY'S HOSPITAL CLUBS' UNION

AT the last meeting of the "Blues" Committee the following "Blues" and "Half-Blues" were awarded :—

Cricket Club.—
Full Blues : A. V. Hurst.

Athletic Club.—
Full Blue : R. U. F. Kynaston.
Half-Blues : R. Merryweather, A. Rosenberg, B. P. Griffin, G. Wotton.

Hares and Hounds Club.—
Full Blues : H. C. Martin, G. W. Taylor.
Half-Blues : B. P. Griffin, R. Merryweather.

Lawn Tennis Club.—
Full Blues : H. L. Joyce.
Half-Blues : C. H. Blockley, D. F. Cook, D. E. Williams.

Boat Club.—
Half-Blues : M. Barber, C. N. Eastes, C. Eugster, C. W. L. Jeanes, M. C. Mundle, A. H. Tarn, J. Whatley, C. Wilson.

D. W. BURNFORD,
Hon. Secretary, Blues Committee.

Hospital Information, etc.

Notices

GUY'S HOSPITAL DENTAL SCHOOL

The following awards have been made :—

Newland-Pedley Medal and Prize for Operative Dentistry.—Mr. J. C. Ritchie, Medal and Prize.

Final Year Prize.—R. D. Plowman, T. N. Praat, Prize divided; A. Kinghorn, G. A. M. Whittall, Certificates.

T. J. EVANS,
Dean.

Pass List

CONJOINT BOARD.
FIRST EXAMINATION.
June, 1939.

Anatomy.

J. F. R. Bentley
A. H. Drewitt
J. A. Irwin
E. O. W. Jones
W. H. Lillywhite
N. A. Power
T. W. Renton
F. H. Staines
J. W. Stephens
T. R. Wooldridge

Physiology.

J. F. R. Bentley
J. A. Irwin
E. O. W. Jones
T. W. Renton
F. H. Staines
J. W. Stephens
D. H. J. Williams
T. R. Wooldridge

Pharmacology.

D. W. Burnford
J. H. Capon
S. N. Cole
F. M. Hayes
D. S. Orr
G. C. Price

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

April, 1939.

F.R.C.P.

The following Members were elected Fellows :—

Hildred Carlill
R. W. B. Ellis
L. Forman
W. H. Grace
R. E. Lane
R. S. B. Pearson
R. E. Smith

CONJOINT BOARD. FINAL EXAMINATION.

July, 1939.

Pathology.

W. E. R. Budd
*F. R. Buckler
*J. S. Crone
E. R. Davies
D. M. Douglas
P. Greenstreet
C. Halamandres
D. A. Hamilton
P. Harvey
S. W. Hinds
J. C. Houston
D. H. Meldrum
R. Moore
M. C. Mundle
C. W. Peck
K. O. Rawlings
F. W. B. Rilstone
H. A. Rowley
T. C. Thorne
J. H. Wildman
D. R. C. Willcox
J. N. Williams
J. Wills

Midwifery.

A. Bloom
*D. M. F. Carter
G. H. Channing
C. L. T. McClintock
*A. J. Drew
D. M. Douglas
C. Halamandres
D. A. Hamilton
P. Harvey
D. H. Meldrum
A. E. Ram
L. G. Scott
T. C. Thorne
D. R. C. Willcox
J. Wills

Medicine.

O. H. E. Bayles
G. C. Bough
*L. H. Boyd
R. B. Clayton
*C. K. Cole
*J. S. Crone
E. R. Davies
*A. J. Drew
*H. P. Dick
P. Greenstreet
B. M. Heap
S. W. Hinds
J. C. Houston
*J. A. Jones
*D. C. Lewin
*H. F. Lunn
*E. L. Moll
D. A. Osborn
*T. G. Pritchard
K. O. Rawlings
H. A. Rowley
*C. H. Phillips
F. W. B. Rilstone
*R. G. Thomas
F. R. Turner
*H. D. Venning
*J. Y. D. Wakeham
J. A. E. Watts
*E. Williams
J. N. Williams

Surgery.

*P. H. Beales
*A. D. Bell
O. B. Brears
H. P. Brown
*F. R. Buckler
*F. N. Glover
*J. A. Jones
A. B. Lennie
*D. C. Lewin
*H. F. Lunn
J. G. Matthewson
E. J. A. Needham
*D. B. Seymour-Price
L. G. Scott
*R. G. Thomas
*G. N. J. Thomas
J. M. W. Wells
*G. S. Wigley
F. L. D. Young

* Have now completed the Examination.

UNIVERSITY OF LONDON. SECOND EXAMINATION FOR MEDICAL DEGREES.

July, 1939.

PART II.

Anatomy and Physiology.

P. Baxter
P. N. Cardew
D. P. Davis
G. W. Downes
D. N. Fuller
R. A. Gough
P. W. Hopper
T. Koonvisal
P. L. Masters
M. J. May
H. C. Mukerji
J. M. Munden
J. B. Musgrove
R. Nigam
H. F. Osmond
J. D. Paulett
T. W. Renton
F. H. Staines
M. N. Teubes
R. Wadia
C. H. Watts
D. H. J. Williams
T. R. Wooldridge

Pharmacology.

P. Baxter
S. H. Bockner
V. Y. Bockner
P. B. Counsell
G. W. Downes
G. C. Foster-Smith
D. N. Fuller
M. F. Gallop
J. D. Grene
P. W. Hopper
B. D. L. Johnson
T. McKeown
P. L. Masters
M. J. May
J. B. Musgrove
R. Nigam
H. F. Osmond
J. D. Paulett
W. A. Porter
A. W. P. Stone
D. I. Thomas
H. A. Thomas
T. R. Wooldridge

UNIVERSITY OF OXFORD. B.M., B.Ch.

June, 1939.

Pathology.

P. R. Cooper
G. L. L. Reynolds
J. P. Rochford

Forensic Medicine and Public Health.

J. A. L. Leeming
E. S. Nicholson

Medicine, Surgery and Midwifery.

J. A. L. Leeming
N. A. Neville
E. S. Nicholson

UNIVERSITY OF LONDON. M.S.

July, 1939.

BRANCH I.

Surgery.

F. R. Kilpatrick
J. E. Spalding

BRANCH III.

Ophthalmology.

C. J. F. Blumenthal.

Papers by Guy's Men

Worster-Drought, C. Observations on persistent and recurrent headache with special reference to migraine. *Post-Grad. Med. J.*, 1939, xv, 258.

Deaths

ROBERTSON.—On July 18th, 1939, suddenly, at Hoy, Storrington, Sussex, John Robertson, M.A. (Edin.), 1883, M.D. (London), 1891, M.R.C.S., L.R.C.P., 1888, aged 76, beloved husband of Evelyn May Robertson.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *12th August* 1939 — *Number* 1332

PASSIM

ON the night of Tuesday last, August 8th, the Hospital staged a local dress rehearsal of the general black-out ordered for the following night. House-officers, fresh from their long week-end in the invigorating wind and rain of the countryside, did their night rounds in wards of which the single table light was heavily draped in black crêpe, while the drone of an occasional aeroplane overhead reminded them that their bruised shins and eyes strained from writing reports in twilight were suffered in an honourable cause. Suddenly a resounding crash was heard in the Park, and inquisitive (and foolhardy) people, running out to discover its origin, found to their dismay large blocks of masonry lying in the roadway near the entrance to the Medical Block. Looking up, one could see that a cornice and a good part of the overhanging stone that decorates the upper part of the doorway into the Medical Block had become detached. Had the reverberation of the bombers overhead dislodged the stone by a sort of sympathetic rhythm similar to that whereby marching soldiers can destroy a bridge? had the recent detestable weather anything to do with it, causing a subsidence of foundations, as in the recent catastrophe on the other side of the river? or was the Medical Block trying to express its readiness to be bombed along with the more venerable but perhaps no more decrepit Surgical Block? No doubt the stone cracked because of intimate physico-chemical changes occurring in its make-up which had been operating for many years, but a transcendental interpretation of the event tickles one's fancy. Buildings are easily credited with personalities of their own, and it is pleasant to think of Hunt's House, whose personality is more readily appreciated than analysed, displaying a human petulance at the care and interest recently applied to the Surgical Block and determining to make reprisals.

THE winner of Crossword No. 2 was the author of the first correct solution to be received here. On another page we print the letter of a correspondent who states the case for selecting the winner by lot, as was suggested in the last number. This time, as before, the later solutions to arrive came from the country, and more than half were offered by correspondents of the female persuasion. In future, therefore, *all* the correct solutions will be placed in a hat on the Tuesday before publication of the *Gazette* and the winner will be picked out by the Editors' secretary, blindfold; the whole transaction being under the supervision of the Editors, whose decision, as heretofore, is final.

Tickets for those who wish to assist at this unique ceremony may be obtained at any time at the *Gazette* Office. The price is a modest 6*d*., and the money so obtained will go to defray the cost of a new desk for the Editor, of which he bitterly stands in need.

WE regret to announce the death of Mr. C. J. Ogle, Consulting Anæsthetist to the Hospital, at the advanced age of 83. An obituary notice by Mr. W. A. Maggs, Consulting Dental Surgeon to the Hospital, appears on a later page.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Obituary

CHARLES JOHN OGLE, M.R.C.S., L.S.A.

CHARLES JOHN OGLE, Consulting Anæsthetist to Guy's Hospital, died on July 25th in his 84th year. He was educated at Bart.'s, but was on the general and dental Staff of Guy's for forty years, and carried out his duties most conscientiously, efficiently and with never-failing regularity, and proving himself a first-rate teacher.

He was an ideal anæsthetist. Ether, chloroform, A.C.E., ethyl chloride and nitrous oxide came alike to him, and he could be relied upon in any emergency.

He possessed self-reliance and inspired others with confidence. Some medical men are not at their best giving anæsthetics, and, afraid of overdosing the patient, go to the opposite extreme, disappointing both the operator and patient. Ogle was also on the staff of several other hospitals for many years, to wit, the Women's, Soho Square, the National Dental, the King George's (so called during the Great War, really the Stationery Office, with 2,000 beds, on the south side of Waterloo Bridge).

His wife died in 1931, and their only child, a daughter, is living and married, without children. She took the B.A. (London) and lately Ogle lived with her and her husband.

The writer of this brief and unworthy notice was a close friend of Ogle, and they had much in common. Born on the same day and year (December, 1855), they exchanged birthday letters regularly for half a century. They were both M.R.C.S., L.S.A., and on Guy's staff and both Freemasons. For many years of my retirement my wife, daughter and self enjoyed the pleasure of his spending his holidays with us in Devon. He was a keen gardener, fond of golf, billiards, and a pipe.

W. A. M.

The Neuroses

A Clinical Lecture delivered at Guy's Hospital, by C. P. Symonds, Esq., D.M., F.R.C.P.

GENTLEMEN,—There is no need for me to stress the frequency of the neuroses and their importance as a cause of suffering and disability. Nor I think is there any lack of interest among you in this subject. On the contrary I have heard complaints from the general practitioner that his medical education in this respect has been inadequate and that in consequence he has found himself ill equipped to deal with the neurotic patients, who, he finds, constitute a large part of his practice. I have two answers to this complaint. One is that in the treatment of the neuroses, more than in any other disease, early and confident diagnosis is of the first importance. No one, therefore, can hope to treat the neuroses with success until he has acquired a thorough knowledge of the principles of diagnosis, both by analysis of symptoms and elicitation of physical signs. Your whole clinical training, therefore, is in a sense a preparation for dealing with the neuroses. The second answer is that in the treatment of the neuroses a few ounces of experience are worth a ton of theory, and opportunity for such experience is limited for various reasons. Time is short, and you must learn all you can of organic disease. Personal responsibility for your patient at hospital is shared with others. There is not the same opportunity of knowing the patient himself, and his surroundings, as obtains in private practice. And you are of necessity lacking in personal experience of many of the problems of life which to your older patients may be of major importance. The opportunities for experience with the neuroses, therefore, will mostly come when you are already in practice. We, as your teachers, can hope only to give you a foundation of method and principle upon which you will build.

What is a neurosis? The question cannot be fairly answered in a sentence or two. We may begin with the statement that it is a disease which, as far as we know has no basis of morbid anatomy. Nor is its cause to be found in any known bio-chemical, infective, or toxic sphere. It is a disease in which there may be a great variety of physical symptoms, which are all capable of explanation in terms of disordered action of the nervous system. Hence the synonym functional nervous disorder. This disorder of the nervous system is apparent at the higher rather than the lower levels of nervous integration, being most evident at the subconscious and conscious levels. It follows that dis-

order of the mental processes is an essential feature of the illness, which may, therefore, be equally well considered as a minor mental disorder.

The distinction between a minor mental disorder (a neurosis) and a major mental disorder (a psychosis) is one of convenience. All the primary mental disorders are " functional " nervous disorders, being without known pathology, or specific ætiology. At one end of the scale, however, there are patients whose mental disorder is of a degree which might cause them to be regarded as insane by conventional standards—for example those of a Justice of the Peace. It is convenient to have a separate medical term for these patients and they are called psychotic, all other degrees of mental disorder being neurotic. There are certain types of mental disorder which very rarely become psychotic—for example hysteria. The schizophrenic patient on the other hand often becomes psychotic at quite an early stage of the illness. Between these extremes lies the affective type of mental disorder which may be either of the neurotic degree (anxiety neurosis, neurotic depression) or the psychotic degree (manic-depressive psychosis). I have entered upon this digression in order that I may make it quite clear that there is in my view no essential difference between a neurosis and a psychosis except that of degree. This is opposed to the opinion at one time widely held that a neurosis and a psychosis were two quite different diseases and of different ætiology, an opinion largely founded on the belief that all neuroses could be accounted for in terms of psychological conflict or motivation. Hence the popularity of the term " psycho "-neurosis instead of neurosis. The prefix is better abandoned.

As you will have gathered there has been so much argument as to the value which should be attached to these words neurosis and psychosis that it would be a comfort to get rid of them altogether. Mapother and Lewis in the most recent edition of Price's Medicine in discussing the matter conclude " The distinction between neurosis and psychosis is at times convenient but without substance . . . since such words die hard the best use of them is to term a patient with mental disorder " neurotic," if he has insight into his illness, is co-operative, and unlikely to need care in an institution, and to term him " psychotic " if the opposite is the case." With this definition we must be content. We have arrived then at the conclusion that a neurosis is a functional disorder of the nervous system, chiefly involving the levels of mental function, and therefore expressed as mental disorder. The degree of mental disorder is less than psychotic. The question which next arises is that of classification. What different kinds of neurosis can we recognise ? The answer again is not an easy one. The scientific method of classification would be in terms of causation, but in many of the neuroses we know more about symptoms than causes. We have to be content, therefore, with a classification based mainly upon symptoms but with reference to ætiology as far as we know it. I shall not discuss the problem of classification further but shall give you a brief account of the two commonest neuroses—Hysteria and the Affective Disorder.

HYSTERIA

The essential feature of hysteria is that the illness in some way or another provides the patient with a means of gratifying a wish, or escaping from an unpleasant situation without his being fully conscious of the motive.

Ætiology. It seems probable—judging from the frequency of mental instability in other members of the family—that inherited predisposition plays an important part. There is often a background of faulty training in childhood. The most important factor, however, is the development of an emotional situation for which the simulation of illness offers the patient a solution. The classical example is that of the soldier for whom a paralysed limb, for instance, offers a means of escape from the front line. In civil life the compensation situation provides many examples. The worse the symptoms the larger the lump sum. The young woman who is in love with her doctor, and is able so long as she is ill to secure his attention, is not very uncommon. But motives are many and sometimes fantastic.

Symptoms. There is hardly any disease which may not be simulated by hysteria. The faithfulness of representation will depend upon the patient's knowledge and experience of disease, the suggestions of friends, and not infrequently the suggestions conveyed by leading questions from the doctor. So far as the bodily symptoms of hysteria are concerned the essential feature of the clinical picture is that it mimics but does not truly correspond with that of organic disease. The hand grip of a hysterical patient with weakness of the upper limb is an example. It is as a rule a quick movement up to the point at which the patient's hand is folded round your own. There is then no further pressure. The patient who is unable to exert pressure owing to *organic* weakness is also slow in *beginning* the movement. The hysteric with an ataxic gait

halts and stumbles but if left alone usually manages to save herself from a fall—or at any rate from a heavy fall—in a way which would be quite impossible if the ataxia were due to organic weakness or loss of equilibrium. Perhaps the most constant and disarming feature of the associated mental disorder is the patient's unassailable conviction of organic disease together with an apparently genuine desire to be cured. The only way for any one of you to appreciate this is to treat a patient yourself. You will, if your approach is gentle, find him ready to listen to your explanation of the facts as you find them, which prove that there is no organic disease, and you may then feel that there is nothing to prevent him from using the paralysed arm. You proceed to show him how to do so and you encounter what seems—as indeed it is—an obstinate refusal to try, ending generally with an expression by word or gesture amounting to " I could have told you so. There *is* something physically wrong, but you did not understand it." You will get the feeling that you are dealing with two separate individuals in the same body. One of them wants to get well, the other does not.

One characteristic form of hysteria is the fugue. Practically all the cases of " loss of memory " of which you read in the papers are examples of this. There is always some poignant situation in the background. For example a patient of mine who had been deserted by his wife, after many years in which he had not heard of her, argued to himself that she was probably dead, and married again. His first wife found him and began to extort money on threat of disclosure. His second wife was wealthy and by one subterfuge after another he obtained from her the means of purchasing silence, until of course the crisis came, in the form of an immediate demand for a sum which he could not procure, failing which there would be exposure next day. He wandered from the house and disappeared for several days, being discovered with loss of memory of his identity and past life. One can understand the need for flight from reality in such a case.

Diagnosis. This depends in the first place upon a sufficient knowledge of organic disease to detect or at least suspect the counterfeit, and a sufficient understanding of the mechanism of hysteria to recognise the symptoms of mental disorder.

Treatment. The object of treatment is to replace the patient's conviction of disability by that of fitness. The ideal method is, having gained the necessary knowledge of the situation, to get the patient to see it in its true perspective, appreciating the motivation and self deception. In practice I believe this ideal is attainable only in a small proportion of cases. It demands of the patient qualities of intelligence, courage, humility, and good humour, which are often conspicuously lacking in the hysterical make-up. But it is an ideal well worth aiming at for the selected few. The best cases I think are those which occur in adolescence. A lad of seventeen, for instance, was brought to me some years ago on a stretcher with paralysis of the lower limbs ; the suggested diagnosis being poliomyelitis. It was clearly a hysterical condition, and on inquiry the motive was soon found. Owing to one of those phases of " bad form " to which cricketers seem particularly liable he was pretty certain to lose his place in the school XI of which he had been a prominent member. A minor injury on the field had rapidly developed into a paralysis which saved his face. By the end of the hour he had won through a burst of tears to self revelation, walked out of my room, and has since done very well—though he lost his place in the XI. I do not want to suggest that such quick attempts at cure are always successful. But the sooner treatment is begun the better. The hysterical child can generally be treated successfully by enlightening the parents, and manipulating the environment. The adult is a more difficult problem. The external situation may be such that treatment is useless until it has altered for the better. For the time being the motive for illness is too strong. This is true of the compensation cases which are in my experience tractable only after the case has been settled. And it may be true in other cases as in that of a woman whose husband was alcoholic but would abstain for the time being if he thought his wife was dangerously ill.

There can be no fixed rule for treatment. Employ suggestion, persuasion, and analysis together and see how far you can get, remembering that although recovery with insight is the ideal there are many patients who for the reasons I have mentioned cannot get so far. Feel your way, maintain a scientific and dispassionate interest in the case, without losing sympathy with your patient, and I think you will find the treatment of the hysteric full of interest and reward.

AFFECTIVE DISORDER

The minor forms of the affective disorder account for the great majority of the neuroses. The essence of the illness is a disturbance of feeling. This is expressed at the mental level as a mood disorder,

usually taking the form of depression or anxiety or a mixture of the two. At lower levels the functional nervous disorder is expressed in a variety of ways—sensations of general malaise and fatigue, insomnia, head-discomforts, dyspepsia, palpitation, giddiness, aches and pains in the back and limbs.

Ætiology. Heredity is the most important single factor. When full data are available a positive family history is obtained in most cases. Many factors singly or together may act as precipitating causes, and these may be psychological or physical. A sudden shock—for instance a bereavement—may initiate a state of depression or anxiety; or it may be prolonged emotional strain such as business worry. The illness may, and commonly does, follow an infective illness, such as influenza, or an endocrine disturbance, such as childbirth or the menopause. In many cases, however, it appears without recognisable cause, psychological or physical.

Symptoms. These patients complain of feeling ill, depressed or frightened without any adequate basis for their complaints in the way of physical or psychological causes. The explanation is that it is their state of feeling which is disturbed. The affective disorder is a functional nervous disorder at the level of feeling.

Some patients will come with the leading complaint of mood disturbance. "I feel depressed all the time without reason." "I feel afraid without knowing what I am afraid of." "There is nothing I need worry about, but I have a feeling of fear and foreboding." Some will complain more of the difficulty of concentration, which is associated with depression and anxiety; some of general malaise—often popularly described as feeling "run down"; others will lay stress on the physical symptoms—insomnia, dyspepsia and the like. Depression and anxiety instead of being vague and generalised may be focal. The patient may be depressed or anxious about a particular situation, which may be real or imaginary, but is usually both. Mole hills are made into mountains. The disorder of feeling is frequently expressed in a negative way, as a loss of natural feeling. The patient cannot feel the same affection for relatives and friends, the same interest in his work and hobbies. This loss of feeling may extend so widely that he feels cut off from the world, unreal, as if living in a dream. Insomnia is a common, though not a constant symptom. The patient is often able to get off to sleep but wakes early.

Head discomfort also is a very common complaint, usually described in terms of pressure, tightness, or numbness of wide distribution, continuous for long periods, and worse when depression and anxiety are at their worst.

Fluctuation in the severity of the symptoms is a common feature. The patient may have good and bad days, good times and bad times. Very often the early part of the day is the worst, in the evening the cloud lifts and feeling may be relatively normal.

There is usually loss of appetite and often, therefore, loss of weight. In the depressed patients constipation is common and in the more anxious states overactivity of stomach and bowel with flatulence and uneasiness may be prominent.

The clinical picture then is capable of much variety. Let the patient talk, however, and you cannot fail to appreciate the feeling disorder which is the core of the illness. It is an illness which *may* begin quite suddenly but is more usually of gradual onset. Its course is variable in the extreme. A phase of depression or anxiety may last for a few hours or days and lift completely; or it may continue and progress with fluctuations for many months. In its mildest degrees it is sometimes amenable to treatment in the early stages so that the illness may be cut short, but as a rule, having continued for more than a week, it gathers its own momentum, which is independent of the initial impetus, and runs its own course, usually to complete recovery. Its duration has generally to be measured in weeks or months, it may last for a year or two and still end in recovery.

Treatment. From first to last it is important to appreciate and let the patient feel that you appreciate, that he is suffering from a real illness. I have no doubt that the man or woman who declares that the agonies are worse than those of any local disease or injury is speaking the truth. It must, of course, have its physical basis. The fact that we do not know what this is is no excuse for depreciating its reality. It must be recognised and accepted as something which is just as real to the physician as an attack of typhoid fever. Depression, fear, indecision, headache, insomnia and the rest are its inevitable symptoms.

It is equally important to help the patient by suggestion, persuasion and analysis of his current difficulties and troubles, to make the best of the illness with all the resources of courage and patience which are available. We must not expect these qualities to be at their best. They are sapped and weakened by the illness. The secret of successful psychotherapy then is so to gauge the depth of the illness and the resources of the individual patient as to see him through it in the shortest possible time, with

least loss of efficiency and least suffering. We may admit to him at once that we cannot tell how long it will last, but promise that it will certainly get well. Every day the patient puts behind him, therefore, will be one day nearer recovery. We can tell him that it is a common illness and that many of his friends have certainly suffered in the same way. Some of them may even be suffering thus at present without his knowledge. We must give his illness a name—nervous breakdown, nervous depression, anxiety state, or neurasthenia, and insist both with patient and relatives that it *is* an illness, not due to his own weakness of character or failure.

If possible keep a man at his work and a woman at her duties. Efficiency may be impaired, and the work is done with a sense of effort, and without happiness but the regular rhythm and sense of achievement, however small, are important assets. Invite confidential and intimate discussion of current worries. A load shared is sometimes a load halved. The patient by reason of his illness has difficulty in judging his emotional problems. He needs re-assurance and advice and you must be prepared to give it—not lightly but after due inquiry and reflection. The proper treatment of this illness, therefore, will demand of the practitioner a good deal of time. He must be prepared to set aside three-quarters of an hour in the first instance to hearing the symptoms and making a thorough physical examination. He will then be in a position to explain to the patient the nature of the illness, and may conclude by setting aside a further half-hour as soon as possible for discussion of the situation in its psychological aspects. This will be the first of a series of interviews probably at intervals of a week or a fortnight which are devoted to psychotherapy. Do not think that psychotherapy is a cult or a mystery. There is nothing in it that any doctor with the right personal qualities and a few fundamental principles to guide him cannot learn for himself. The right person to give this treatment is the patient's own doctor, who knows the man and his surroundings. If the doctor has not in himself the qualities which lend themselves to success in psychotherapy he had much better pass the patient on to a colleague. The essence of psychotherapy is that it is a personal relationship. As Mapother and Lewis remark it cannot, therefore, be made a routine except in its non-essentials : " whatever rules the psychiatrist follow or whatever training he has undergone, he himself will be more important than his method in benefiting the patient."

The treatment of physical symptoms may be important in itself and is an essential part of psychotherapy. The patient often regards these symptoms as the *cause* of the illness. To the physician they appear as a *part* of the illness, a fact which requires frequent explanation. At the same time advice as to diet, regulation of the bowels, hours of rest and amount of exercise are important. Sedatives are of value for restlessness but should not be given as a routine. Large doses of bromide given over long periods are harmful. A mixture of chloral and bromide given occasionally after food is useful. Hypnotics are often needed. One of the barbiturates —medinal, nembutal or allonal are among the best—in an effective dose is suitable. It is sometimes best given when the patient wakes rather than at bedtime.

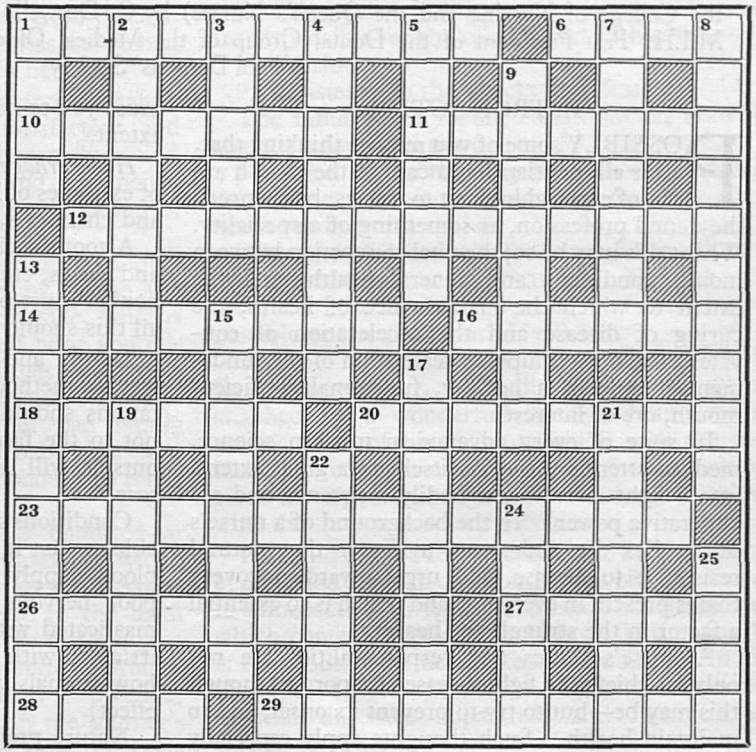
The prognosis, as I have said, is generally good—that is the patient recovers from the individual attack. There is, however, a strong liability to recurrence. Prophylaxis is therefore important. A patient with a known liability should be encouraged to come to his doctor for advice and if necessary for a sedative or hypnotic in times of emotional stress. If he comes with vague physical complaints he should be asked how he has been feeling in himself—depressed or worried—how he is sleeping. A timely rest, long week-end or holiday may sometimes prevent recurrence. Such a patient also should receive especial care after an operation or an infective illness. He needs more analgesic, more hypnotic and a longer convalescence.

There is, of course, another side to this. Many patients are apt consciously or unconsciously to take advantage of especial attention and sympathy, and make capital out of invalidism. We all have our blind spots, and may well beware of creating invalids instead of curing them. On the whole, however, I believe that the patient with an affective neurosis receives too little sympathy rather than too much. It is doubtless a trying illness, and they are trying patients, dependent and exacting. But an illness whose prognosis is generally good is a good illness to treat.

I have said that the prognosis is generally good. There are a certain number of patients in whom the affective disorder becomes chronic and who are in a mild degree invalids all their lives. The principles of treatment in these cases are the same. Many neurotic patients are kept going for years by their doctors at a level of efficiency and relative well-being which they could never achieve without help. Fortunately there is always room for hope. A patient may remain in a state of chronic depression and anxiety for ten years or more and yet recover.

Crossword No. 3

By "Pepsin"



ACROSS

1. Granulation tissue seems pleased with itself.
6. Mark often found on child's neck.
10. Describes 23 across in a star.
11. Charm to bring lovers together, but sounds like a separator.
12. (2 words—10, 4.) Inflammatory condition shown by short-skirted servants.
14. Lasting, though finished early on.
16. Obviously protected.
18. Region of the brain.
20. Sufferer from Parkinson's disease?
23. (2 words—7, 7.) Can he be easily moulded?
26. Short summary, though a volume in the end.
27. Silent.
28. Free from pain.
29. Chief season for giving motion.

DOWN

1. Child-bearing.
2. (Anag.) Dies too.
3. Common feature of eyes and spine.
4. Rubifacient.
5. Short month I see sounds bad.
7. Severe.
8. Describes, *e.g.*, K or I.
9. (2 words—5, 3.) The tree is upright, perhaps, but gives help before the doctor arrives.
13. Half brain.
15. Recital describing near structures.
17. Achieved when square completed.
19. Itch.
21. Snoring sounds.
22. Skin disease.
24. Teg.
25. Stone when horned.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 22nd August.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 2: A. G. C. Cox, Guy's Hospital.

SOLUTION No. 2

P	E	R	P	E	T	U	A	L	M	O	T	I	O	N
E	■	U	■	N	■	■	U	■	M	■	N	■	U	■
S	I	M	P	L	E	■	U	N	D	E	R	F	E	D
S	■	M	■	A	G	E	■	A	■	N	■	A	■	I
A	N	A	C	R	O	T	I	C	■	T	E	R	E	S
R	■	G	■	G	■	H	■	Y	■	U	■	C	■	T
Y	■	E	M	E	T	I	C	■	P	M	U	T	S	■
■	■	■	■	■	O	C	U	L	O	■	■	■	■	■
■	A	P	R	O	N	■	P	U	R	G	E	D	■	V
S	■	A	■	V	■	O	■	C	■	A	■	I	■	E
P	I	N	N	A	■	F	O	R	E	S	I	G	H	T
I	■	A	■	R	■	F	■	E	A	T	■	I	■	E
R	A	C	H	I	T	I	S	■	U	R	E	T	E	R
I	■	E	■	E	■	C	■	■	■	I	■	A	■	A
T	R	A	N	S	V	E	R	S	E	C	O	L	O	N

Dentistry & Care of the Mouth—Aids to Health & Beauty

A Talk on Teeth to Nurses at the Worthing Hospital (together with Members of the Local Branch of the College of Nursing and the Queen's Nurses) by C. Doswell Wallis, Esq., L.D.S., R.C.S. Eng., M.I.H., Past President of the Dental Group of the Medical Officers of Health Society and of the School Dentists' Society

INTRODUCTION

POSSIBLY some of you may be thinking that, after all, dentistry and care of the mouth are not of especial interest to nurses, but concern the dental profession, as something of a speciality. Whilst this may be so, the vital connection between mouth conditions and general health, and the extent to which the maintenance of health, the curing of disease and the acceleration of convalescence depend upon a realisation of the fundamental value of a healthy, functionally efficient mouth, *are* of interest.

In spite of every advance in modern science, medical attention resolves itself, to a great extent, into a fight to maintain bodily resistance and recuperative power. In the background of a nurse's duties lies the endeavour to foster that natural resistance to disease, and urge towards recovery that is present in everyone, and which is so essential a factor in the struggle for health.

A nurse's duties and responsibilities are not only, or chiefly, to fight disease—important though this may be—but to try to prevent its onset, and to maintain health. Such thoughts apply especially to school nurses and health visitors, whose duties relate more particularly to the establishment of healthy conditions rather than to the curing of ailments.

The care of the mouth and dentistry form a subject so varied and many-sided that it has been a task of some difficulty to condense the story of the mouth so as to fit into half an hour or so, and to try to include everything of interest has proved well-nigh impossible.

It is essential in thinking of the dental aspect of health and disease to get the right point of view and correct mental outlook from the very start.

Once these matters are looked at in the proper perspective, it becomes largely a matter of applying that professional and technical knowledge you already possess to such problems as may present themselves, and making full use of "common sense"—that invaluable solvent of so many human difficulties.

Take as examples two conditions with which you may have to deal—Hæmorrhage and Sepsis. From your general knowledge of nursing you will be able to deal with these by the same methods as elsewhere, and common sense will suggest that there are factors, peculiar to the mouth, that must cause you to modify the lines of treatment to some extent.

Hæmorrhage can be checked by the application of extremes of heat or cold, the use of certain drugs and chemicals, pressure or sutures.

A tooth socket is small and awkward to get at, and drugs, etc., are rapidly diluted in the mouth, neither must poisonous substances be introduced; all this should be kept in mind.

Sepsis, and alveolar abscess, are treated by routine methods, always remembering that fomentations should be applied *inside* the mouth, and not to the face or neck; as drainage from the outside will leave, on healing, an unusually ugly scar.

Conditions in the mouth are peculiarly favourable in that it possesses an exceptionally generous blood supply (witness its red colour), relatively poor nervous reaction (hard foodstuffs can be masticated without discomfort), and is constantly irrigated with a healing fluid—the saliva (compare how animals will lick their wounds, with curative effect).

Nature provides us with teeth to eat with, not that they may themselves be eaten up by decay. It is an arresting thought—that whereas teeth are the most resistant structure to disintegration in the animal body, frequently being all that persists in fossil remains many thousands of years old—yet the influence of modern civilised habits is such that decay of the teeth and other dental complaints affect over 90 per cent. of the population. The very universality of dental defects tends to encourage the uninstructed to regard them with complacency, or as inescapable evils, and so neglect to seek attention or advice until it is too late.

This is the principal reason why the good offices of the nurse, midwife and health visitor are so valuable, they having opportunities not always open either to doctor or dentist of impressing upon those under their care the great importance of mouth conditions and the necessity of dental supervision and attention.

As suggested above, possibly the study of the mouth and teeth may not seem of especial interest, so this talk is entitled "Aids to Health and Beauty"—for who can fail to be interested in health or in the wish to attain some degree of beauty? Besides, health, beauty and happiness go hand-in-hand!

HEALTH

There is only one kind of health—good health ! Any deviation from this is to be thought of as an ailment, disability or illness.

Good health is not just freedom from disease, but a vital physical and mental alertness and feeling of well-being that makes it good to be alive.

Our chief aim should be to maintain healthy conditions, as being far more satisfactory and economical than trying to cure abnormalities and ailments after they have arisen, and a principal factor in any such endeavour is the condition of the mouth.

Whilst it may seem depressing and disheartening to look around at the great masses of disease and disability that confront us on every side, there is one fact that holds out the greatest hope and encouragement, and of which the fullest advantage should be taken in the fight for health. In spite of unsuitable environment and of bad family history, a very large proportion of babies are born perfectly healthy, and every effort should be made to maintain this wonderful asset.

Similarly, almost every baby is endowed at birth with a sound dental equipment, which deserves far greater care than is at present devoted to its maintenance. Actually, care of the teeth should start some six months before birth.

Nature teaches the great value and importance of good teeth in that, rather than allow their proper development to suffer, she will rob the mother's system of calcium salts to build into the bony framework of the baby's body and the teeth. This goes a long way to explain the fact that almost all teeth are erupted sound and healthy.

Nature is a wise, kindly and powerful ally and friend, but she will not tolerate the slightest transgression of her laws ; punishment is always sure, and at times swift. One cannot hope to improve on Nature, and to attempt to do so is to invite disaster.

Although when first erupted teeth are sound, their condition degenerates so rapidly, under present unnatural modes of living, that by the time school age is reached some 90 per cent. of the children show defects of some kind in their mouths, many of which are quite serious, calling for radical treatment by extraction, thus upsetting the balance of the masticatory machinery.

The number of elementary school-children reported with dental defects is nearly four times as great as the number showing defects of every other kind all put together. This is of grave importance when it is realised that the mouth is so designed and its functional attributes are such that it forms one of the very foundations upon which that vitality essential to good general health rests, and that it is intended to form the first line of defence against the attacks of disease.

THE MAINTENANCE OF HEALTH

Starting with a healthy body, two main factors are responsible for the continuance of health :—

1. Nutrition.
2. Resistance to the attacks of disease.

The influence of mouth conditions on both is obvious upon reflection.

Nutrition is the building up of bodily vitality by making use of those constituents of a diet needed to form the tissues. No matter how good, suitable and abundant the food may be, it will not promote nutrition until it has been digested and absorbed into the blood-stream, and this is not possible unless the mouth is efficient.

The mouth is designed as a machine, a " mill " for the mastication of food. The lower jaw is attached by a wonderfully designed and quite unique form of hinge joint, which with the remarkable muscular arrangements for its operation gives a very wide range of movement, working with the utmost ease and efficiency.

It should also be remembered that the first stage of digestion starts in the mouth, food being reduced to a fine state of division and mixed with the saliva, which contains digestive ferments. If the mouth is functionally inefficient, food is swallowed in an unprepared state, which puts undue strain on the internal digestive apparatus, and nutrition is certain to suffer.

So far, only loss of function and negative damage has been considered, but the presence of sepsis in the mouth has even greater detrimental effects, doing positive harm. Toxic infectious material is swallowed almost constantly, indigestion and a host of other ailments and diseases are very liable to follow, which further interfere with normal nutrition. Good digestion means good health.

Most diseases are caused by the attacks of germs. These disease germs can do but little harm unless they gain access to the body tissues. The skin is very resistant, almost germ-proof—apart from traumatic conditions (*e.g.*, cuts, abrasions, insect bites, etc.), and the main avenue of access is through the mouth.

After entrance has been gained to the body, the danger from germ invasion is made greater if conditions favourable to their growth and proliferation are present, when the harm they are capable of effecting is tremendously increased.

Now the mouth forms an ideal breeding-place for these germs, being dark, moist and providing abundance of food for their multiplication.

Another common avenue of entry to the body tissues is through cavities in the teeth, more

especially if the pulp chamber is opened, as this gives direct access to the lymphatics and blood.

On the other hand, a healthy mouth is the first line of defence against germ attacks.

Bacteria, as you know, are tiny plants, which are broadly of three types :—

1. Those which are beneficial.
2. Those which are harmless.
3. Those which are pathogenic (disease germs).

The mouth, in common with the other mucous cavities, has a natural, indigenous flora of the first two categories, and in health exotic invaders have great difficulty in establishing a foothold and cannot manage to persist for any length of time, being crowded out by the normal inhabitants ; in much the same way that weeds will over-run an artificially cultivated garden, unless constantly removed.

This makes us cautious of prescribing the regular use of antiseptics in the mouth, whether as mouth washes, dentifrice or the like, except to combat some definite diseased condition, as their continuous use breaks down these natural barriers to infection, and leaves undefended what amounts to an ideal incubator.

DENTISTRY

Dentistry should not be thought of as just another speciality, as it transcends all others in vital, fundamental importance.

Care of the mouth forms a part of the very foundations on which good health and physical fitness must be built. Decay of the teeth is far from so trivial a matter as might appear at first sight.

The practice of dentistry, being largely surgical, involves the removal, not of adventitious tissue or new growths, but of what was once normal tissue (now diseased or necrosed), so that definite loss of body substance or mutilation results, which has to be replaced by artificial substitutes. This is comparable to an amputation and adjustment of an artificial limb, and none of these substitutes, however good, are equal in usefulness to their natural predecessors. Neither can deficiencies so treated be rightly looked upon as " cured."

Certainly adequate treatment of dental defects checks or prevents the spread of the disease, and will mitigate the intimate and remote consequences of sepsis and loss of function ; but, nevertheless, dental disease itself is incurable. This incurable disease affects almost the entire population, and inflicts irreparable damage on the " mouth machine," besides leading to innumerable and often serious complications.

Early attention, constant supervision and repair as occasion arises are clearly indicated as the only sound methods of procedure.

One cannot but realise the great interest that mouth conditions have upon consideration of the important role the mouth plays from the very dawn of life. The very first action, at birth, is the establishment of breathing, and this has a close relation to the face and mouth. It is purely involuntary and automatic.

The next function to be established is feeding and nutrition, and here the mouth plays a very important part. This action is instinctive and voluntary, and the earliest to be established. Movements of the hands and limbs commence considerably later.

The advantages of breast-feeding are strongly emphasised, not so much that a suitable diet is provided (the perfection and suitability of artificial milk supplies and special baby foods is established), but that adequate exercise of the mouth is unavoidable ; the baby's red face and exhausted condition show how strenuous is the effort entailed.

This fatigue ensures restful sleep during the period of digestion, and the red face indicates a plentiful supply of blood for the correct development of the face, mouth and teeth.

Exercise of the mouth promotes normal development in just the same way that exercise of the trunk and limb muscles develops general physique.

The real importance of abnormal or diseased conditions of the mouth lies in interference with function and nutrition. This is more especially so in childhood, when organic development, together with physical and mental growth, have to be provided for, as well as the preservation of nutritional balance.

BEAUTY

Beauty has been described as skin-deep, whereas the springs of real beauty are actually deeply seated, and the foundations upon which it rests are laid down in early childhood.

It may seem strange to think of beauty culture in relation to babyhood, yet trifling errors during early days, if not corrected, will mar and detract from perfection in later life. Defects or disabilities may only become apparent at some period of strain (such as adolescence), and lasting results cannot be hoped for if the foundations are not secure.

There is a reason for everything, and it should prove of interest to try to discover some of the springs of beauty.

Beauty, in the generally accepted meaning of the term, consists of two main items : perfection of colouring and perfection of form and contour. Form may be subdivided into general contours (height, symmetry, balance, etc.) and facial contours. This latter aspect is of greater importance

and worthy of special attention, as the face is exposed to view, whilst deficiencies elsewhere can be hidden, disguised and compensated for.

It is not generally realised to what a great extent facial beauty depends upon the teeth. Not only the contours but the colouring of the face are closely related to a well-developed and cared-for mouth, which is within the reach of everyone. A good complexion, a fine, soft skin and pleasing colouring are largely dependent upon good general health, which depends upon sound nutrition, which itself depends upon the correct use of an efficient set of teeth and a clean mouth.

The framework of the face is composed of bones whose chief function is to hold the teeth, give attachment to the muscles that move the jaws, and to take up the stresses and strains produced during mastication. It is upon this bony framework that all the contours of the face are built up.

The outline of the bones is laid down long before birth, and although their general outline does not change with growth (additions being to their length and thickness, and not influencing their shape or direction), their development can, at least to some extent, be guided during the years of early life.

Always bear in mind that, during growth, the bones are constantly changing their form as they develop, and are in a plastic state, so that relatively small forces are capable of altering their contours, more especially when such forces are exerted over considerable periods of time; *e.g.*, the habit of sleeping with a hand under one side of the face will force the entire face over sideways and produce very definite deformity, if not corrected.

The bones of the face consist of the eye-sockets, the nasal bones, and the jaws, which latter form by far the greatest bulk and are designed solely to accommodate the teeth, and together with the masticatory muscles and associated parts accessory to them are responsible for giving line, contour and expression to the face.

TRACING THE DEVELOPMENT OF THE FACE

Seven or eight months before birth the first rudimentary beginnings of the jaws and teeth can be traced. The developing teeth are enclosed in " crypts " or spaces in the bone, and do not appear on the surface till erupted later into the mouth.

At birth, the teeth as yet having no roots, are short and packed away in the bones of the jaws. This largely explains the shape and general outline of a baby's face. Who has not admired a baby's chubby face and round, bulging cheeks? Unromantic though it may appear, these are, literally, stuffed full of developing teeth, some fifty in number.

At first, the roof of the mouth almost touches the floor of the orbit, which accounts for the squat shape of the face. As age advances, and co-incidently with the development of the roots of the temporary teeth, the nasal cavity enlarges and the face lengthens.

Next the developing teeth of the second set continuing to grow bigger, whilst the first teeth are still in the mouth, the child's face again becomes fuller and rounder. Later, when the permanent teeth erupt and the first are shed, the face again lengthens, and subsequently, with the full development of their roots, the face gradually assumes the leaner, more clear-cut, appearance of the young adult.

Passing from adolescence to full growth, the face fills out somewhat, as the bones consolidate and muscle and fat develop. In later life, much of this fat may be eliminated and a more rugged appearance results. Until, finally, when all the teeth are lost in old age, the alveolar bone atrophies, being no longer required to support the teeth, and the shape of the jaws being modified in accordance with these changes, the well-known " nut cracker " contour is produced.

From the foregoing facts it is apparent to what a surprisingly large extent the contours of the face depend upon the teeth, and the various changes that occur as they develop, from the very earliest babyhood right up to old age.

Coincidently with these changes in the teeth and their attachments, the bones of the face are assuming arched shapes, a sort of groined arrangement resulting to take up the stresses and strains of mastication to the greatest advantage. That these are very considerable is demonstrated by the calculation that the pressure exerted by a well-developed set of natural teeth is equivalent to 250 lb. weight. The bones also become hollowed out, in the interests of lightness, forming the various cavities present in the adult skull.

THE TONGUE

An important factor in determining the alignment of the teeth is the influence of the tongue.

The lower teeth erupt before the uppers and are arranged in a horseshoe shape, bieng directed into place by the mutual pressure of the tongue, lips and cheeks. The upper teeth also are guided into place by the influence of the tongue, lips and cheeks, and the opposition of the lower teeth.

The whole arch is eventually locked by the canines, the last of the teeth to come into place, which from their position and wedge shape act as " key stones."

The arching of the palate, in a vertical plane, depends partly on the action of the tongue and partly on the air pressure in the nose.

The weight of the lower jaw is supported, when the mouth is closed, not so much by muscular action as by contact of the tongue on the palate producing an area of negative pressure, or suction. This exerts a downwards pull upon the palatal bones, and the rush of air to and fro in the nasal passages produces a downwards pressure, which combine to force down the roof of the mouth, mould the arch of the palate, and spread the sides of the upper jaw. These influences being absent in the "mouth breather," the normal contours of the face are not and cannot be attained, the characteristic "rabbit" appearance being the result.

In conclusion, reflect that the mouth is the point of entrance where the alimentary and respiratory tracts make contact. It is very truly described as "The Gateway of the Body" and the dental surgeon is "The Guardian of the Gate."

There is an old saying that "A Picture is worth a Thousand Words," so we will recapitulate and sum up the main items of this talk with the help of lantern slides and pictures.

Correspondence

Graduate Medical Education

To the Editor of the GAZETTE

SIR,—I am glad to have Mr. T. F. Todd supporting me in the most important of the minor parts of my suggested reorganisation of medical education. Mr. Todd was always in advance of current thought. Even as a student he elected to do throat diseases before he became a full dresser, so that, as he admits, one was able to plant the good seed upon a virgin soil instead of having to spend most of one's time in uprooting the tares sprung up from ideas that the lessons to be learnt from a limited abdominology form the principles of surgery instead of exceptions to them. And now the Medical School have elected to send all students to us at that stage so that, in mine old age, I have to spend my time in teaching the courtesies between medical men and the handling of patients that have slipped through the mesh of the educational sieve as handled by the assistant surgeons. These are the things which, as Wing-Commander Stanley Turner points out, used to be taught by the masters under the apprenticeship system. I am entirely with him in realising its value, but that we can get back to it is unthinkable. A problem before us educationalists is what are we to do to compensate for this loss.

I have long advocated, with this in view, that the work done by the assistant surgeons' dressers in the Back Surgery should be performed by senior students in the Dissecting Room, but have never received any support, and have been met by a blank refusal on the part of the teachers in the pre-clinical period. Thanks to the appointment of a clinical tutor we are no longer wasting the educational value of this material, but I regret that we do not use it to better purpose by enabling the student more early to come in contact with the patient, especially as that contact has been further deferred with the institution of the clinical class for a period of three months—or rather two and a half.

But while I am glad to have the support of your two correspondents in the matter of detail, I am bitterly disappointed that you, Sir, have headed the correspondence "Post-Graduate Instruction" and have thereby missed the main proposal of my suggested reorganisation of medical education, which is the recognition of a "graduate" stage between the under-graduate and post-graduate periods.

Dr. Stanley Turner evidently has the same idea as I have running through his mind, but I will have nothing to do with his suggestion of the deferring of registration. Father's pocket is the first thing we must safeguard, and then remove the fear of a compulsory examination from the student's mind. That is one of the reasons why I have always fought the idea of a specialists' register. But I am not going to be dragged into the details of specialisms; Mr. Todd has done it very ably as a basis of discussion. I am writing on the subject as a whole as a medical educationalist.

Yours, etc.,

T. B. LAYTON.

Guy's Hospital,
S.E.1.

P.S.—I do not like the word "adumbrated."

—T. B. L.

The Crossword Puzzles

To the Editor of the GAZETTE

SIR,—Many thanks for the crossword puzzles, but please give those of us living at a distance a chance! We do not get the *Gazette* till middle day on Monday, and cannot always sit down there and then to solve the puzzle. It

would be much fairer to put all the envelopes in a hat, and if the first one taken out is not correct, give the prize to the first one that is.

Yours, etc.,
DOROTHY WINTER DRYLAND.

Kington,
Herefordshire.

The Wills Library

To the Editor of the GAZETTE

SIR,—We would like to add our support to the statement on the Wills Library made in a recent " Passim." A particularly valuable suggestion, in our view, would be the centralisation of all the Hospital's periodicals under one roof.

The present system of departmental libraries seems to us to be inefficient, both from the point of view of the reader and of the librarian.

The reader is faced not only with the time-wasting task of going the round of the various departments in each of which the books are kept under lock and key, but with the preliminary difficulty of tracking down references to the correct library.

From the point of view of librarianship, it seems that at present certain somewhat glaring deficiencies in the departmental libraries cannot be remedied because of lack of funds. Centralisation would at once underline these deficiencies, and by the pooling of resources make it possible to remedy the more important ones.

Yours, etc.,
G. C. KENNEDY.
M. LUBRAN.
C. C. SPICER.

Guy's Hospital,
S.E.1.

Hospital Appointments

THE following appointments and reappointments have been made by the Court upon the recommendation of the School Council; duties to commence on October 1st, 1939 :—

Registrar and Statistician in the Radium Department—
T. H. Hills, Esq., M.B., B.S., L.R.C.P., M.R.C.S., reappointed for one year.

Assistant Director (Female) of the Venereal Diseases Department—
Miss M. Rawlins, M.B., M.S., reappointed for one year.

Medical Officer (Male) in the Venereal Diseases Department, also attached to the Physician in Charge of the Skin Department—
D. Erskine, Esq., M.D., D.P.H., reappointed for one year.

Medical Officer (Male) in the Venereal Diseases Department, also attached to the Surgeon in Charge of the Genito-Urinary Department—
A. G. Johnson, Esq., M.R.C.P., M.R.C.S., reappointed for one year.

Medical Officer (Female) in the Venereal Diseases Department—
Miss M. R. Levack, M.B., Ch.B., reappointed for one year.

Hæmatologist to the Hospital—
R. L. Waterfield, Esq., M.B., B.S., M.R.C.P., reappointed for one year.

Senior Assistant Bacteriologist—
E. Sayle, Esq., M.B., B.S., reappointed for one year.

Junior Assistant Bacteriologist—
A. W. Taylor, Esq., M.B., Ch.B., M.R.C.S., L.R.C.P., reappointed for one year.

Additional Assistant Bacteriologist—
E. H. Koerner, Esq., D.M., M.B., B.S., reappointed for one year.

Chief Clinical Assistant and Registrar in the Ear, Nose and Throat Department—
A. Bowen-Davies, Esq., M.B., B.Ch., F.R.C.S., reappointed for one year.

Chief Clinical Assistant and Registrar in the Ophthalmological Department—
P. M. Moffatt, Esq., M.D., F.R.C.S., D.O.M.S., reappointed for one year.

Chief Clinical Assistant and Registrar in the Radio-Therapy Department—
T. H. Hills, Esq., M.B., B.S., L.R.C.P., M.R.C.S., reappointed for one year.

Chief Clinical Assistant and Registrar in Medical Out-Patients—
W. G. Tillmann, Esq., M.R.C.S., L.R.C.P., appointed for two years.

Chief Clinical Assistant and Registrar in the Orthopædic Department—
J. H. Mayer, Esq., M.B., B.S., F.R.C.S., reappointed for one year.

Chief Clinical Assistant and Registrar in the Neurological Department—
M. J. McArdle, Esq., M.B., B.S., M.R.C.P., appointed for two years.

Chief Clinical Assistant and Registrar, Department of Psychological Medicine—
F. W. Brown, Esq., D.M., M.R.C.P., reappointed for one year.

Chief Clinical Assistant and Registrar in the Children's Department—
N. M. Jacoby, Esq., M.D., M.R.C.P., M.R.C.S., appointed for one year.

Clinical Assistants in the X-Ray Department—
C. F. Cosin, Esq., M.D., reappointed for one year.
O. W. Robinson, Esq., L.R.C.P., M.R.C.S., D.M.R.E., reappointed for one year.

Instructor of Patients with Defective Speech—
H. St. John Rumsey, Esq., M.A., reappointed for one year.

Dental Officer to the Salomons' Centre—
F. A. Walker, Esq., L.D.S., reappointed for one year.

Dental Anæsthetist to Salomons' Centre—
E. H. Rink, Esq., B.M., B.Ch., reappointed for one year.

Sport

Cricket

GUY'S *v.* STOICS

ON Wednesday, July 5th, the Stoics beat Guy's at Honor Oak Park by 6 wickets. The Hospital batted first and scored 142, thanks mainly to a good innings of 59 by Morey. If it had not been for some bad luck, Guy's should have scored many more, as three of the better batsmen were out in unfortunate ways—two were run out and one hit the ball hard on to his pads, only to be given out l.b.w.

Some rather erratic bowling enabled the Stoics to knock off the necessary runs with the loss of only four wickets.

Scores.—Stoics, 219 for 9 (Morey, 2 for 22; Curties, 2 for 31; Skea, 2 for 49; Knight, 1 for 33; McClintock, 1 for 34; O'Gorman, 1 for 19; Birks, 0 for 17).

Guy's

G. O'Gorman, run out	5
A. V. Hurst, b. Barker	8
L. G. Morey, b. Harrison	59
P. H. Birks, l.b.w. O'Gorman	15
D. C. Boyd, run out	0
J. W. A. Crabtree, c. Bromage, b. Barker	6
J. R. Lauder, b. Harrison	9
C. L. T. McClintock, b. Harrison	13
J. H. H. Knight, b. Barker	0
R. L. Skea, not out	4
Extras	14
Total	142

GUY'S *v.* MIDHURST

GUY'S and Midhurst drew a rather uneventful game at Midhurst on Saturday, July 15th. Batting first, the Hospital raised the very respectable total of 228 for 8 before Chase declared.

Morey again batted well and scored another half-century. O'Gorman also was on form and he was top scorer with 70.

Ede bowled well for Midhurst, taking seven wickets out of the eight for 83 runs.

Midhurst started slowly against a fairly steady Hospital attack. But the bowling soon became innocuous, and Midhurst scored 105 for two by the close of play.

McClintock bowled well, although with little success.

Scores.—Midhurst, 105 for 2 (McClintock, 1 for 19; Hurst, 0 for 4; Chase, 0 for 8; Birks, 0 for 12; Curties, 0 for 14; Morey, 0 for 18; Knight, 0 for 27; O'Gorman, 0 for 46).

Guy's

A. V. Hurst, b. Gibbs	14
L. G. Morey, c. Birchett, b. Ede	57
D. N. Fuller, c. Birchett, b. Ede	13
G. H. G. Chase, c. Annell, b. Ede	22
G. O'Gorman, c. Birchett, b. Ede	70
P. H. Birks, c. Piper, b. Ede	21
J. R. Lauder, c. Chamberlin, b. Ede	2
H. A. Thomas, c. Birchett, b. Ede	9
R. C. Curties, not out	10
Extras	10
Total for 8, declared	228

C. L. T. McClintock and J. H. H. Knight did not bat.

GUY'S *v.* CRANLEIGH

THE Hospital beat Cranleigh quite comfortably on Wednesday, July 26th, at Cranleigh, although it was left to Chase to score most of the runs.

Guy's started badly, losing three wickets for 33 runs, but a good fourth wicket partnership between Chase and Cole put on 74 runs. After

Cole, who batted well for 26, was out, the remaining batsmen did not give the bowlers much trouble.

Chase batted very well and carried his bat for a very useful 80, not out.

The Cranleigh batsmen offered very little resistance to some bood bowling by Skea, who finished the day with the excellent analysis of 5 for 14.

In the last over of the day McClintock took three wickets in five balls.

Scores.—Cranleigh, 53 (Skea, 5 for 14 ; McClintock, 3 for 4 ; Morey, 1 for 8 ; Knight, 1 for 22).

Guy's

G. H. G. Chase, not out	80
L. G. Morey, c. Chandler, b. Clee	6
D. N. Fuller, c. Clee, b. Bateman	2
D. C. Boyd, b. Bateman	4
S. N. Cole, c. and b. Atwell	26
D. R. C. Harrison, b. Atwell	0
J. R. Lauder, hit wkt., b. Atwell	0
H. A. Thomas, b. Chandler	9
C. L. T. McClintock, c. and b. Chandler	3
R. L. Skea, b. Atwell	4
J. H. H. Knight, b. Atwell	0
Extras	7
Total	139

Golf

GUY'S *v.* CHARING CROSS

GUY'S beat Charing Cross in the Semi-Final of the Inter-Hospitals Cup, which was played at West Hill on 3rd July, Guy's won three foursomes matches. Praat and Ritchie played particularly good golf, needing par figures for the last two holes to be round in 71.

In the singles also Guy's showed their superiority by winning five and halving one of the eight matches.

An excellent day's golf, enjoyed by everyone, and Guy's once more in the Final !

Results were as follows :—

FOURSOMES

Guy's		*Charing Cross*	
T. N. Praat & J. C. Ritchie (3/2)	1	I. W. H. R. Cran & T. P. H. McKelvey	0
J. W. R. Drury & P. F. E. Brown (2 up)	1	J. L. I. Williams & C. D. Cruickshank	0
W. James & D. C. Steven	0	W. B. W. Grieg & B. E. Catchpole (3/2)	1
K. S. Maclean & J. G. Mathewson (w.o.)	1	G. W. Bellis & A. H. Ferguson-Gow	0
Total	3	Total	1

SINGLES

J. C. Ritchie (2/1)	1	I. W. H. R. Cran	0
J. W. R. Drury	½	T. P. H. McKelvey	½
T. N. Praat (6/5)	1	J. L. I. Williams	0
P. F. E. Brown	0	C. D. Cruickshank (4/2)	1
W. James	0	W. B. W. Grieg (2/1)	1
D. C. Steven (3/1)	1	B. E. Catchpole	0
J. G. Mathewson (6/5)	1	G. W. Bellis	0
K. S. Maclean (4/3)	1	A. H. Ferguson-Gow	0
Total	5½	Total	2½

Hospital Information, etc.

Notices

In future, Medical Out-Patients will be seen by :—

Dr. Boland, 12.30 p.m. Mondays.
Dr. Campbell, 12.30 p.m. Tuesdays.
Dr. Grant, 9 a.m. Wednesdays.
Dr. Lintott, 12.30 p.m. Wednesdays.
Dr. Hampson, 12.30 p.m. Thursdays.
Dr. Douthwaite, 12.30 p.m. Fridays.
Dr. Lintott, 9 a.m. Saturdays.

PRIMARY F.R.C.S. COURSE

The next Primary F.R.C.S. Course will begin on 1st September, 1939 ; details to be arranged by the Heads of the Anatomy and Physiology Departments.

Guy's men wishing to join the course should give in their names at the Medical School Office.

T. J. EVANS,
Dean.

Pass List

CONJOINT BOARD.

June, 1939.

PRE-MEDICAL EXAMINATION.

Chemistry.

R. H. Beare
D. C. Boyd
N. P. Bronsdon
P. C. S. Campion
D. F. L. Cook
G. L. Evans
A. H. Farrell
D. M. Griffith
M. V. Guilmant
P. C. Hadley
K. Lewis
J. C. Matthews
H. Mistlin
T. J. Moloney
J. E. Pountain
C. L. E. H. Sharp
V. L. Simons
B. H. Taylor
A. B. Vanscolina
P. J. Wardill

Physics.

A. R. K. Ashton
R. H. Beare
N. P. Bronsdon
J. Bunch
W. L. J. Crossman
R. C. Curties
G. L. Evans
A. H. Farrell
G. D. Gibb
D. M. Griffith
M. V. Guilmant
C. S. Matthews
H. Mistlin
J. E. Pountain
V. L. Simons
B. H. Taylor
P. J. Wardill
B. Wilson

Elementary Biology.

R. H. Beare
N. P. Bronsdon
J. Bunch
T. C. Collins
P. C. J. Crisp
T. P. Dalton
M. V. Guilmant
R. E. Hyman
K. Lewis
J. C. Matthews
N. D. Miller
H. Mistlin
D. S. Nelson
D. J. Rayner
C. L. E. H. Sharp
V. L. Simons
J. N. Staniforth
L. I. Tewfik
P. J. Wardill

UNIVERSITY OF LONDON.

SECOND EXAMINATION IN DENTAL SURGERY.

PART I.

July, 1939.

Pass.

W. J. Ford
E. Horne
J. F. Mordaunt
A. Ross
A. J. Walters

The following students are credited with Anatomy and Physiology.

T. D. Birtwhistle
T. P. Cheevers
R. D. Emslie
J. R. Halden
T. J. Hancock
R. C. Lawrence
H. C. Martin
T. A. Morris
H. W. Palowker
C. E. Stuart
B. H. Wilshere

PART II.

Pass.

*H. A. Hall
R. E. Matthews
G. W. Sawyer

* Awarded a mark of distinction.

THIRD (B.D.S.) EXAMINATION IN DENTAL SURGERY.

Honours.

(*a*) (*b*) J. G. Hancock.

(*a*) Distinguished in Pathology and Bacteriology.

(*b*) Distinguished in Orthodontics.

Pass.

H. Rees
D. L. Rugg-Easey

Supplementary Pass List.

The following student passed in

GROUP I.

K. R. Titford.

The following student passed in

GROUP II.

W. J. Head.

M.D.

July, 1939.

BRANCH I.

Medicine.

*C. S. Darke.

* Awarded University Medal.

FIRST EXAMINATION FOR MEDICAL DEGREES.

July, 1939.

Internal Students.

R. A. Allen
M. A. Barker
R. H. Beare
N. K. Bezboruah
H. McB. Brown
R. G. H. Clarke
J. C. Cox
M. D. Cremin
D. G. H. Davies
A. B. Dickie
B. G. E. Donner
J. S. Ebsworth
H. M. Emrys-Roberts
G. W. Garland
E. A. Glover
A. J. Goodwright
P. C. Grummitt
A. Hargreaves
D. H. Hawkins
H. F. Hills
S. D. Holloway
F. R. S. Knight
P. G. Large
A. B. Lee
B. C. Lee
K. A. MacDonald
S. A. Marsh
R. Merryweather
J. K. Morgan
P. B. Morris
R. L. Ray
L. P. Ribet
N. J. Shah
C. Steer
I. T. The
J. C. P. Weber
E. G. Wright

External Students.

R. Woolcott.

ROYAL COLLEGE OF PHYSICIANS.

M.R.C.P.

July, 1939.

W. M. Philip.

UNIVERSITY OF OXFORD.

D.M.

R. McDonald.

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

July, 1939.

Surgery.

M. E. Davies
W. E. Roden
W. N. Vellacott

Midwifery.

J. N. Hunt
N. A. St. C. Marley

Change of Address

J. Kenneth Donald, L.D.S., R.C.S., Hursley, Poole Road, Bournemouth. *Tel.* 4157.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *26th August* 1939 — *Number* 1333

PASSIM

ONE of the many advantages of staying on at Guy's over a week-end is the opportunity that is thus afforded for working more slowly and therefore with more interest than is possible during an ordinary week-day. Letters can be written that will really be of use to the doctor of the patient one has just sent out and a puzzling case can often be persuaded to divulge salient details of history or physical signs that were unobtainable in the hurry and clamour of Friday evening. Nor is the atmosphere of Guy's on a Sunday an unpleasant one, though the empty reading-room has a tinge of melancholy on a hot afternoon and the necessity of using the underground every time one wishes to cross from the College to the Hospital is a source of irritation.

To no one do these considerations apply with more force than to the Editor of this journal. It is perfectly possible to do all that is necessary to bring out a number of the *Gazette* in a few half-hours during the week, though this is largely due (as in the running of a Government Office) to the excellence of the permanent officials. But in the day the time is stolen from one's ordinary work, while by evening one is disinclined (and often incompetent) for work which, in its modest way, is creative.

But this warm August Sunday, similar superficially to so many others, has a character which is both unpleasant to appreciate and hard to analyse. During the last fortnight we have seen from the top of the Medical Block, the railway stations of Cannon Street and London Bridge blazing serenely away during the black-out; we have seen from Out-Patients the French bombers engaging our own fighters in mimic air-battle, and every night the starlings in the Park are awakened (they then awake the patients) by aeroplanes passing overhead. And to-day the newspapers are unrelievedly gloomy. It is worth remembering that, as a nation, we are already taking part in a war of nerves, and that to admit depression is not necessarily to give way to it. It is easier to dispel it by means of reasonable, useful work, if we admit its presence, than if we, ostrich-like, deceive ourselves about its existence.

NEVERTHELESS, escape is often necessary, and there are less neurotic methods of escape than that of living on the top of a high mountain in a house approachable only by the use of a lift-shaft cut in the virgin rock. The wisest escapism has always been that into the past. Many a great statesman burdened by his responsibilities has reattained a sense of proportion by reading a calm history of conflicts long ago.

With this in mind, we offer to our readers this week a diary written by a Guy's student in the year 1811. Dr. John Sims, as he afterwards became, was apprenticed to a Dr. Ransome, of Manchester, in 1809, and it was during this apprenticeship that he came up to London and attended Guy's and St. Thomas's. Dr. Sims eventually specialised in midwifery, becoming Surgeon-Accoucheur to Queen Charlotte, though at that time this must have been a purely honorary appointment.

He lived in Cavendish Square, in the corner house leading into Holles Street, and had a large London practice. He wrote a diary covering many years of professional life, from which the excerpts which we publish to-day were extracted by Dr. G. T. Birdwood, who was himself at Guy's from 1889 to 1902, and whose son-in-law is a great-great-grandson of Dr. Sims.

We hope to publish later Dr. Sims's indenture of apprenticeship to Dr. Ransome.

WE wish to congratulate Dr. C. S. Darke on acquiring the M.D. London, with the University Gold Medal. The degree was obtained in Part I of the examination, that is in Medicine, and the latter distinction is a rare one among Guy's men. We apologise to Dr. Darke for not taking adequate notice of this event in the previous number.

As we go to Press we note the publication of a small handbook entitled "Nursing in Time of War," by P. H. Mitchiner, of surgical textbook fame, and Miss MacManus, the Matron of Guy's Hospital. A review will appear in the next number of the *Gazette*, but the highly topical character of the book, as well as the local distinction of its part-authoress, compels us to take notice of it now. Its price is 1*s*. 6*d*., and it is obviously of first-class importance to medical men and nurses alike at the present time.

Angina Pectoris and Coronary Thrombosis

PART I.—DIAGNOSIS

A Lecture delivered at Guy's Hospital on 23rd September, 1938, by Maurice Campbell, M.D., F.R.C.P.

GENTLEMEN,—I have chosen this subject of angina pectoris and its diagnosis, partly because of its intrinsic importance and partly because I think that at a large general hospital such as Guy's one gets less experience of angina than of many other conditions that are really no more common. I am always surprised by the relatively small number of patients with angina among the out-patients here as compared with the number at the Heart Hospital, where I rarely have a Clinic without seeing two or three new cases of angina, and perhaps many more; and in private practice it is much the same. So that although you do not see a great deal of it here, you probably will do so later, and as it is a very important condition, you should take every opportunity of studying the cases you see here and of obtaining all the information you can about them.

Another reason why I have chosen to speak to you on the subject is that there are few conditions where a correct diagnosis is more urgent. One sees many patients, perhaps with normal hearts or perhaps with some relatively minor disorder, who think they have angina, and have given up everything and lead a miserable existence, doing nothing and expecting to die at any moment. On the other hand, one sees many others who have had unmistakable warnings that have been neglected. Dr. Skene Keith, our pathologist at the Heart Hospital, tells me that most of the coroners' cases on which he carries out post-mortems, where the patients have died suddenly, have been under treatment for indigestion and not for their hearts, if they have been under treatment at all.

Those two considerations are enough to make you realise how extremely important the diagnosis is.

DEFINITION OF ANGINA

I am going to try and give you a definition of angina, because rather different views have been held about it. I am sorry that the best definition I can give depends upon a theoretical underlying idea, and therefore must remain open to possible criticism in any one case. We shall have made a great step forward when we can settle the diagnosis with the same certainty as that with which we can settle the diagnosis of typhoid fever by a particular test. Though in most patients the diagnosis is easy and can be made quickly and readily, that position has not yet been reached for the difficult and doubtful cases, and may not be.

I think the most useful definition is that "angina pectoris is a pain felt in the chest or in the neck or in the arms, produced by an inadequate blood supply to the heart." Of course, it is the latter part of the definition which you cannot test directly. You make a diagnosis thinking that you know the cause; sometimes you can be quite certain of it, but sometimes you are not absolutely certain. In the present position I think one must include the fundamental idea of its seriousness because of this inadequate blood supply to the heart. Most often the inadequate blood supply is due to disease of a coronary artery, and it is in this sense that angina pectoris is a real diagnosis of an underlying pathological condition and not merely the elevation of a single symptom into a diagnosis by giving it a Latin name. This indicates that we cannot ascribe all heart pain to angina.

There are many other sorts of heart pain of quite different significance, some of which I shall discuss. Nor is every patient with a pain in the chest necessarily suffering from angina.

ANGINA PECTORIS AND INFRA-MAMMARY PAIN

The first important distinction between these types of pain is, I think, between true angina and a pain which I have called " inframammary pain," which is very common among patients who have or think they have something wrong with their heart. These differences are set out in Table I. The position of the pain is the first thing to consider. Angina is generally felt in the mid-line, whereas the other type is generally felt under the left breast. In certain cases of angina the pain occurs only in other sites, however, and you may have to make this diagnosis in a case where the pain is under the left breast or in the back or in the left arm only. But that is unusual, and if the pain is in the mid-line and if the other necessary qualifications are fulfilled, you should rather start with the assumption that it is angina and proceed on this assumption until you have disproved it, whereas if the pain starts under the left breast you must rather commence with the assumption that it is not angina.

TABLE I.

	Angina Pectoris.	*Inframammary Pain.*
Site	Mid-line (limited or spreading)	Under the left breast.
Duration	Two to ten minutes	Hours or days.
Relation to exertion	*During* exertion	*After* exertion.
Age	Generally over forty	At any age.
Sex	More often men	More often women.
Electrocardiogram	Probably T-wave changes	No special change.
General	Few complaints	Many complaints.

The pain of angina is likely to spread from the mid-sternal site upwards to the root of the neck, outwards to both sides particularly to the left, down both arms, but more commonly down the left arm. Nearly every patient has a constant story as to where the pain stops in the arm; sometimes at the elbow, sometimes at the wrist, and sometimes in certain fingers. If we could get these different types properly analysed we might go even further and say which particular part of the heart is involved in each case, but at the moment that remains a matter for research. Another spread which is important is upward into the lower jaw. I have seen a patient, where the spread into the lower jaw was the most severe part of the pain, having his teeth attended to for the pain, and the diagnosis was not made until he had an actual coronary thrombosis. It may also spread to the back; cases in which the patients have no pain in the chest, but only in the neck or only in the back or only in the arms, may be just as important as the others, provided the other characteristics of angina are fulfilled.

The next point is that of the duration. Anginal pain does not last very long, only from two to ten minutes. The other type, *i.e.*, the inframammary pain, may last for hours or days.

The next important thing is the relation of the pain to exertion. I want to impress upon your minds particularly these first three factors of site, duration and relation to exertion, for they are fundamental and the others are less important. The pain of angina comes during exertion; in its most characteristic form it comes at the beginning of exertion, and not at the end of exertion when the patient is getting tired. On the other hand, inframammary pain may not be felt at all during the exertion, but may occur when the patient is sitting in a chair *after* doing something unusually energetic; if it occurs at all during exertion it will occur towards the end of the period of exertion, when the patient becomes tired. I do not mean that all patients with angina lose their pain towards the end of a long walk. Some, if they walk a hundred yards or a mile at a certain rate, experience the same amount of pain, during all the stages, but others become more able to walk without pain as they get into stride, and some may be able to walk faster for quite a long distance when they have got through the initial stages.

The answer to these three questions will often point the same way and you should then be sure of the diagnosis at once.

Frequently the diagnosis is not made because the doctor is looking for severe pain—the usual picture given in the textbooks—and there may be

nothing more than a little tightness. This question is discussed more fully in distinguishing angina and coronary thrombosis. Nor is " angor animi " a common feature of the anginal attack. It may occur, though it is rare ; it is more often found with vaso-vagal attacks and other syndromes. It is, of course, quite distinct from the intellectual judgment that life may have been in danger.

There are other points which are useful in distinguishing the conditions. One is that angina generally occurs in an elderly patient of more than forty years of age, whereas the inframammary pain may occur in patients at any age. Angina occurs about five times as frequently in men as in women, whereas inframammary pain occurs more often in women. Again, in most cases of angina there are electrocardiographic changes, whereas patients suffering from inframammary pain show no particular changes. If they have high blood pressure they may show left ventricular preponderance, or they may be perfectly normal.

Lastly, the patient with angina generally has very few complaints. He does not think he is a sick man in the sense of feeling ill ; indeed, he generally feels well, except that he gets pain as the result of exertion ; probably he has nothing else to complain about. He may have high blood pressure and all the symptoms associated with it, or may have congestive heart failure and the symptoms associated with that, but more usually there is nothing except the pain on exertion. On the other hand, inframammary pain, which often leads to a wrong diagnosis of angina, occurs more when people are tired, overworked or worried, or are recovering from an illness ; that is to say, in patients who are generally ill and have many complaints. If you can spare the time, you can probably fill a couple of pages with a statement of their complaints. It is often true that the patient with one complaint has an organic disease, whereas the patient with the largest number of complaints has probably some nervous disorder. But as with most generalisations in medicine, this would be a dangerous rule, though it is a useful guide.

THE RELATIONSHIP OF ANGINA PECTORIS AND EXERTION, EMOTION AND MEALS

I would like to discuss a few different types of angina and their relationships. So far I have only spoken of the angina of effort, which is the most common and the most important. Just the same picture may be produced by emotion. A patient who is angry or worried or excited may experience anginal pain, and a certain number experience it even when at rest, in rather severe cases without any obvious emotional cause. I have stressed already the constant relationship to a particular kind of exertion. If a patient can walk several miles one day and another day is held up by pain at the start, it is unlikely that he has angina, because one can hardly picture the underlying condition of his coronary arteries changing to that extent.

On the other hand, in some cases you find this important difference, that a patient gets pain easily at the start of a walk, but after he has rested and starts again he can go further the second time, and perhaps the third or fourth time he can go on quite well without experiencing pain at all. It is obvious that if angina always represents an inadequate blood supply to the heart—and in most cases that means disease of the coronary arteries—the arteries cannot change so greatly from moment to moment, and the attack must be precipitated by arterial spasm, or by the demands made on the heart or by some other factor. I think this relationship to exertion brings angina pectoris very close to the phenomenon of second wind. There you have much the same features as in angina. After a certain amount of exercise an untrained person becomes very short of breath and suffers considerable discomfort, but as he continues, the relationship between the cardiac and the respiratory mechanisms becomes adjusted so that he can carry on. In certain cases of angina there must be some such adjustment between the heart and the lungs which enables the subject to carry on much better after the start. A few patients, if they get into the habit of walking at the rate of two miles an hour when they first leave home, can manage very well and at a later stage can quicken up the pace considerably. It is most important to remember, in treatment, this need for going very slowly at the start.

Another factor related to the onset of angina of effort is the question of meals. There is no doubt that, after a meal, angina is provoked much more easily than at other times. A man may feel pain on walking only a hundred yards after a meal, whereas he may walk half a mile or so without pain if he has not taken a meal just beforehand. In some cases he has pain only after a meal, showing that relationship between stomach and heart ; and if he rests sufficiently long after meals he is free from angina and is for the time being cured.

This is seen very often in a man who hurries to work after breakfast. I think that a simple expedient such as rising half an hour earlier than has been their habit in the past may enable many people to carry on their work, whereas otherwise they feel the anginal pain so badly that they want

to give up. That is a very practical and important matter in treatment. It is so marked in many cases that the patient is quite certain that he has indigestion. I have reminded you that a good many of these patients who are under treatment for indigestion may die suddenly in the street, when they ought to be under treatment for their hearts. Therefore you should be very sceptical about the diagnosis in the case of middle-aged and elderly patients suffering for the first time from "indigestion" after meals.

OTHER TYPES OF ANGINA

Next I come to some types of angina which occur without exertion. Where a patient gets pain at rest, even sometimes when in bed, the diagnosis is more difficult. I will mention the two most important things leading to this type. The patient gets a sudden attack of dyspnœa and experiences a certain tightness in the chest associated with it. If he suffers attacks at night only, you should inquire very carefully into the nature of the dyspnœa. It may be an attack of cardiac asthma rather than an ordinary attack of angina. You may say that both conditions point to a failing heart and therefore that their differentiation is not fundamental. But it is most important from the point of view of treatment, and to a lesser extent of prognosis, because the treatment for the two conditions is quite different and, serious though angina is, cardiac asthma is more serious.

The second factor which often gives rise to attacks which are nocturnal rather than related to exercise is syphilitic disease of the aorta above the aortic valve, giving pain very like that of angina; but it occurs more often at night and lasts for a longer time. So that if a patient has angina with effort and also experiences attacks at night lasting for half an hour or an hour instead of the usual ten minutes, syphilitic aortitis must be considered.

A third type which I should like to differentiate has been described as vaso-motor angina. It is thought by some people that in those cases there is no disease of the coronary arteries and that the whole question is one of fatigue or over-excitability in a patient with a responsive nervous system. There is not the least doubt that the degree of coronary disease associated with anginal pain varies very much in different people, and that the importance of these outside or reflex factors is very important for the prognosis. I think there are few, if any, cases that can really be called pure vaso-motor angina; there is nearly always underlying disease of a coronary artery, and the so-called vaso-motor angina is simply a matter of differentiating between two very important groups, those having slight coronary disease with active reflex spasm and those having severe coronary disease, where very slight changes in the calibre of the artery or in the demand for blood by the heart are enough to provoke attacks.

You may ask how people can experience similar symptoms with varying degrees of coronary disease. The answer is that it is due to the nervous system, and that there is some change produced by the nervous system to give rise to the attack. A patient's temperament is a great source of help in assessing the prognosis of angina. In a stolid, unemotional type of man who thinks nothing of illness and has only recently experienced the pain the disease may be far more serious than in the very anxious and excitable type, and the outlook may be much worse, because in the case of the excitable type the attack is precipitated by 10 per cent. of organic disease and 90 per cent. of the reflex factor which is amenable to treatment, whereas the stolid and unimaginative type does not know he has angina until the coronary disease has advanced a very long way.

I have never understood why there are not more cases of angina among the population around Guy's Hospital. It is obvious that these hard-working dock labourers, for example, must impose considerable strain on their hearts, and one sees a great deal of other heart disease among them. It is possible that if a man is doing hard physical work and if the heart is getting into difficulties as the result of coronary disease, the heart breaks down in other ways before angina develops. That may explain why angina is more often found among business men and brain workers than among manual workers; in the latter the heart may be more liable to break down in some other way at an earlier stage.

OTHER TYPES OF CARDIAC PAIN

There are three other types of cardiac pain which you may find difficulty in distinguishing from angina. One is the pain of pericarditis. In ordinary infective conditions of the heart, in chronic pericarditis and in valvular disease, there are generally no symptoms of pain referable to the chest, and in many cases the patient is quite unaware of the trouble. Often, however, in acute pericarditis the patient experiences a pain in the middle line, and it may be made worse by exertion or deep breathing as the heart moves and may to a slight extent simulate anginal pain. Naturally it will not often give rise to difficulty in diagnosis, because probably the patient is already ill and in bed.

When a patient has heart failure and congestion of the liver he may get a mid-line pain on exertion,

but the pain is usually lower in the epigastrium than in some cases of angina and is simply due to an increased degree of congestion of the liver.

The third type, which is related to exertion and may be felt in almost any site in the chest, is where the patient has a large dilated auricle. Often the pain increases with exertion and stops at once on resting, and probably in those cases the stretching of the auricle under the stress of increasing work affects the pericardium. None of those three types are very common, but they should be remembered in this connection.

DIFFERENTIAL DIAGNOSIS FROM NON-CARDIAC CONDITIONS

The last two outside conditions I want to consider from the diagnostic point of view are anæmia and diseases of the gastro-intestinal tract. You should never make a diagnosis of angina without considering whether or not the patient has some degree of anæmia. It has been stressed in recent years that patients suffering from anæmia may have severe angina, which latter clears up entirely when the anæmia is treated. It is not certain whether the angina is entirely due to the anæmia with the consequent poor blood supply or whether there is a slight degree of coronary disease which renders the anæmic blood inadequate for the heart's needs.

My own impression is that there is always some heart disease as well, and that when anæmia is said to be the cause of angina and the patient can be cured entirely by the treatment of his anæmia, he will in the course of some years suffer again from angina, whether he becomes anæmic again or not. Probably in a few years this matter will be settled by following up cases, but I think you should watch very carefully a patient who has anæmia and whose angina is cured when the anæmia is cured. In any case, it is so important and helpful that you should never fail to look for it.

The next point about diagnosis concerns diseases of the alimentary tract. Œsophageal pain is felt in the mid-line, in just the same site as the anginal pain. If you want to know the site of anginal pain, swallow a large solid mass of toffee, or something of that sort which sticks together, and you will be able to determine the site of the pain immediately.

Flatulence is extremely common in association with all these cardiac conditions, and often it makes the patient think that he is really suffering from indigestion. I would rather say that flatulence in a middle-aged or elderly man who has not had indigestion before should lead you to a thorough examination of the heart. One should not assume that it is indigestion.

A point on which opinions differ is whether hyperchlorhydria alone can produce, on exertion, a pain which is indistinguishable from that of angina. Many claim that patients having hyperchlorhydria cannot suffer pain if they rest, although if they exert themselves immediately after a meal they feel a pain just at the anginal site. I would not deny that it is possible, but I would say that it is a very dangerous diagnosis to make in any case of pain on exertion after a meal, and it should never be made without a most thorough examination of the heart and without the knowledge that everything there is absolutely normal; in such a case the electrocardiogram is essential.

The last problem in this group is the question of gall stones. Diagnosis can be difficult where gall stone pain is felt in the middle line without any of the characteristic symptoms. The two things tend to occur in the same patients; I have seen a large number who have both conditions, and one or two who actually have had jaundice during their attack of coronary thrombosis through obstruction by gall stones. But in most cases, provided you realise the difficulty and have thought of all the associations of the two conditions, there will be some fairly clear pointers towards one or the other. But remember that the two conditions may occur in the same patient at the same time.

Much has been written about the treatment of angina by removing gall stones. I have seen several patients who have had gall stones removed when suffering from angina, and I think most have died from coronary thrombosis in the end. I do not believe that any improvement in the coronary arteries can be produced by operation on the gall bladder. If a patient gets gallstone colic it is very unfavourable for his angina and should be treated, but it would be unwise to tell him that the treatment would cure his angina. I should, therefore, like you to think of the two together from the point of view of diagnosis; for treatment I should like you to keep them distinct and to tackle each on its merits.

ANGINA PECTORIS OF RECENT ONSET

There is one other thing I want to say about angina which may appear to be anomalous. It is that if a patient has had angina for five years he is in a much safer position than if he has had it for only five weeks. The patient who has had the complaint for five years was at one time in the same position of having had it for five weeks only, and is five years nearer to his death; but many patients with angina of recent onset never pass those five years.

The reason it is more serious than angina which has been there for some time is that you do not

know what may be happening in the coronary arteries. It suggests that some vessel may be getting narrower and may soon be occluded completely, while after some time if the clinical condition is stationary, there is less risk of this happening in the immediate future. I think the only case in which it is justifiable to put a patient with angina to bed the first time one sees him is when he has had angina for only a few days or weeks. You should rest him at once, hoping that the quiet life may prevent the development of thrombosis and may bring about a great improvement in his condition. I do not think that complete rest in bed is always advisable in such a case, because in some of the older or debilitated patients that rather helps to produce thrombosis. A quiet life in one room is probably the best treatment.

Later, when talking about treatment, I want to stress the need for special rest when the trouble has been getting progressively worse recently. If a patient could walk half a mile without pain a month ago but to-day can only walk a hundred yards without pain, that too suggests the probability of a narrowing coronary artery. I shall not have time to deal with this important question of treatment to-day; I will speak to you about it on some later occasion. I shall limit my remarks to diagnosis, as I think it is difficult to overemphasize its importance.

DIFFERENTIAL DIAGNOSIS OF ANGINA PECTORIS AND CORONARY THROMBOSIS

The next point concerns the equally important differential diagnoses as between ordinary angina pectoris and coronary thrombosis. This clinical recognition is of quite recent origin, extending back not more than 12 or 15 years. Probably you are all good at the diagnosis of coronary thrombosis. Students are generally better at anything that is recent than at anything that has been known for a hundred years. Even so, I should like to stress the points which I think important.

Incidentally, this was not a discovery of the electrocardiograph; it was a clinical recognition of a syndrome and of its association with coronary thrombosis. The cardiograph has done an enormous amount to add precision to the picture and to establish it, but the actual picture was developed by clinical observations, mostly, I am sorry to say, not in this country. It does remind you that there are probably many important clinical conditions waiting for you to recognise and describe, and that this can be done by good observers without any elaborate technique.

The first condition I want to discuss is the onset. This and the other points of differential diagnosis are summarised in Table II. It is possible for coronary thrombosis to come on after exertion or emotion, but more often it comes on without any such relationship, frequently when the patient is at rest. A large number of patients are wakened at night by pain and are sure that they have severe indigestion. Although generally I speak of coronary thrombosis, it is more accurate to speak of cardiac infarction, because in many cases the obstruction of the artery is due to atheroma gradually narrowing the lumen and not to an actual thrombosis.

TABLE II.

	Angina Pectoris.	*Cardiac Infarction.*
Onset	With effort or emotion	Spontaneous; at rest.
Severity of pain	Slight to severe	Severe or "agonising."
Duration	2-10 minutes; relieved by rest	Hours.
Attitude	Immobile	Restless; walking about.
Pulse	Unchanged	Small, often rapid.
Heart sounds	Unchanged	Often faint or gallop rhythm or pericardial rub.
Shock	Absent	Present, with sweating and vomiting.
Blood pressure	Normal or raised in attack	Falling after attack.
Dyspnœa	Absent or slight	Often severe.
Congestive failure	Absent or slight	Often develops after.
Relief	With tab. trinitrini	Only with morphia.
Temp. and leucocyte count	Normal	Raised.
Electrocardiogram	Stationary	Changing (S-T elevation).

Next the severity of the pain; one of the factors which leads to failure in diagnosis, perhaps more than anything else, is that the books still stress the severity of the pain in angina; this comes from the influence of the period before thrombosis was recognised. Most patients would not much mind the severity of the pain if they knew that it was of no importance. The pain in the case of angina varies from slight to severe, and in some cases where slight pain may be quite as significant as severe pain, the patients are unwilling to use the word pain, but talk of constriction or a suffocating feeling. So that in angina the pain may be very slight, in contrast with cardiac infarction, where it is generally very severe, though there are rare cases where there is little or no pain. I think you will find it interesting clinically to keep a list of every patient who uses the word agony; I have been amazed by the number of stolid men, accustomed to put up with pain, who use this word in connection with coronary thrombosis.

Then we come to the duration of the pain. With angina it is short, but with cardiac infarction it is long in duration. Associated with this is the fact that anginal pain is relieved by rest, whereas the pain of cardiac infarction is not. A patient suffering from angina generally stays immobile and wants to stand, whereas the patient suffering with cardiac infarction is restless and probably wants to walk about.

Those are the symptoms which lead to the main differentiation. Next the pulse; in angina it is generally unchanged, but in coronary thrombosis it is small and often rapid. The heart sounds are unchanged in angina, but in coronary thrombosis they may change very quickly and may be faint or there may be gallop rhythm; a pericardial rub is not common, but of great value in diagnosis when it is heard.

Perhaps the most important matters in regard to the patient's general condition are his appearance as a whole and the question of shock. A patient with angina may look as though he is in pain and may show some changes in his face, but there is not much change in his general condition. The patient with cardiac infarction, however, very quickly passes to a state of shock; often it is extreme and you get just the same general picture as in surgical wards in cases of gastric ulcer and abdominal emergencies; it may be difficult to distinguish in cases where the pain is low down. Yet it is essential in those serious cases that the right diagnosis should be made.

Sometimes the blood pressure will help. It may be raised during an attack of angina, falling spontaneously or as the result of nitrites as the attack passes. With cardiac infarction, if you know the ordinary blood pressure you may find the fall starting hours or days after an attack, rather than within a few minutes as in the case of angina.

A patient with coronary thrombosis has dyspnœa; in severe attacks he may be very short of breath. Congestive failure often develops after.

Anginal pain can be relieved with nitrites quickly, but an attack of coronary thrombosis is relieved only by morphia.

The temperature is normal with angina, but it

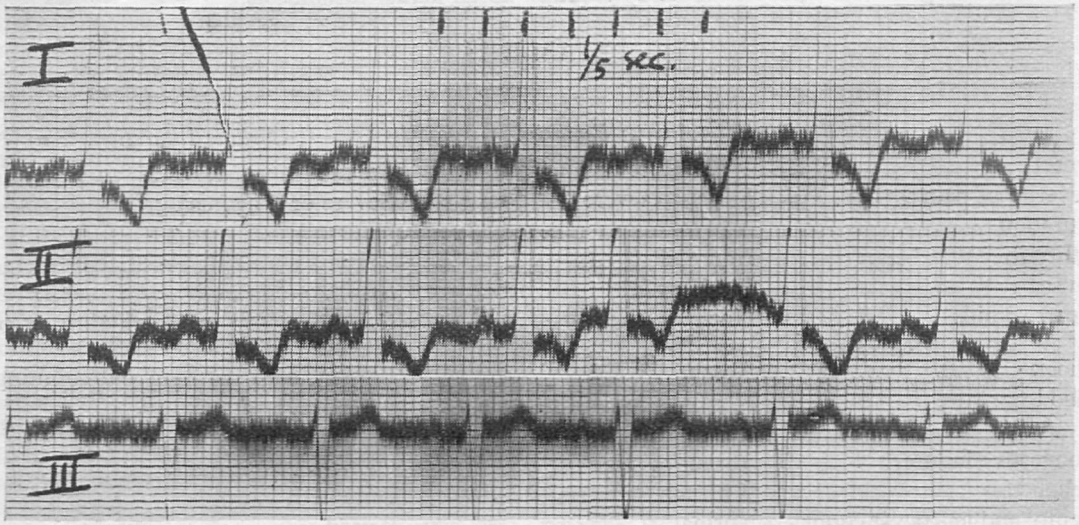


Fig. 1.
Deep inversion of T in leads I and II and some depression of the S-T interval. From a man with angina pectoris and aortic stenosis.

is frequently raised for two or three days after a cardiac infarction.

The last point is that in a case of angina the electrocardiogram does not change as a rule; in a few cases it changes during the attack, but you do not very often have an opportunity of taking a cardiogram soon enough after an attack to detect this temporary change. On the contrary, the changes after cardiac infarction provide one of the main proofs. I have purposely left this to the last because the diagnosis can generally be made without it.

In my opinion the electrocardiogram is more important in an ordinary case of angina than in coronary thrombosis. If there is any doubt about the diagnosis it may be invaluable in both, and may enable one to say with certainty that there is disease of the coronary arteries. But a normal cardiogram does not disprove the diagnosis of angina, and one with very little abnormal soon after an infarct may lead to a false sense of security.

If the diagnosis of coronary thrombosis has been made on clinical grounds it should be kept to unless two electrocardiograms with a week's interval fail to show any characteristic change. The sense in which it is more important for a case of angina where there is no doubt about the diagnosis is that changes or the absence of changes in the next six or twelve months add so much to our knowledge of what is happening in the coronary arterial tree and so aid in the diagnosis.

In coronary thrombosis the early changes are of extreme interest, but do not as a rule influence treatment. If only one or two cardiograms can be taken, this should be done at a later stage when the patient is getting about again, as it is then more help in treatment and prognosis.

Finally, a few words about the electrocardiographic changes. In Fig. 1 there is nothing to indicate whether it comes from a patient with coronary thrombosis or from one with angina. The deep pointed inversion of T_1, associated with the inversion of T_2, is characteristic of myocardial disease due to coronary ischæmia. It is, in fact, an instance of T_1 change associated with angina and aortic stenosis in a man who had nothing to suggest a cardiac infarct, even though there was some depression of the whole S-T interval, probably due to his large left ventricle.

Fig. 2 shows the high S-T take-off above the iso-electric line (here mainly in lead II) which is very characteristic of early coronary thrombosis. Although this does not provide absolute proof, it should suggest at once to anyone the probability of coronary thrombosis. Actually, this patient came to the surgery just after a thrombosis; he had a very irregular heart, with extrasystoles and probably with paroxysmal fibrillation, and died on the seventh day.

Fig. 3 shows the same S-T changes in leads II and III, and shows how these develop into inverted T waves (Fig. 3*b*). Later on this patient recovered, the T waves improved further, and in lead II became level again.

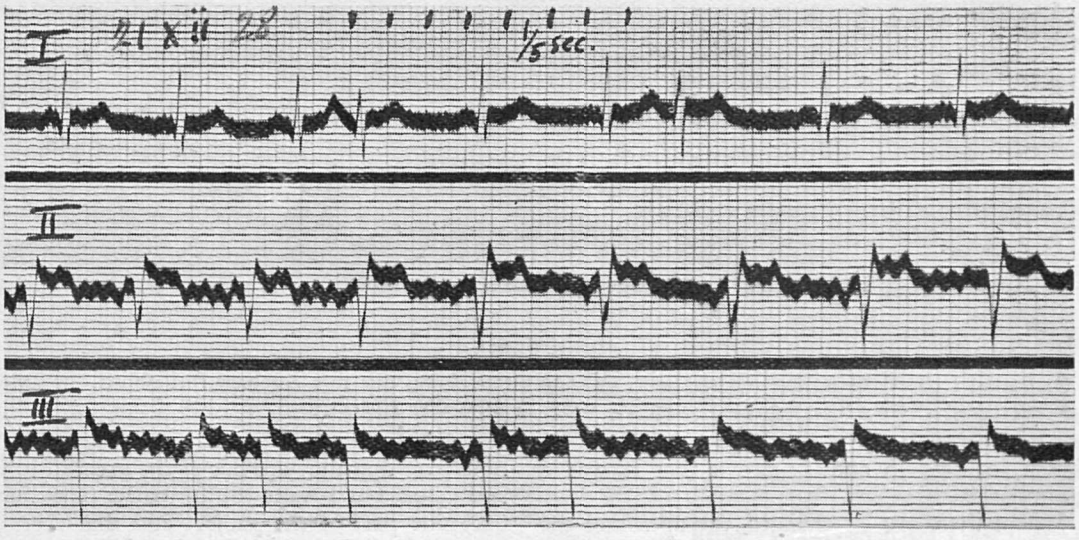


Fig. 2.
Elevation of the S-T interval in leads II and III (and extrasystoles) just after a coronary thrombosis.

Fig. 4*a* shows T_3 inversion without depression of the S-T interval; at first it is uncertain whether this is due to coronary disease and angina or to a recent coronary thrombosis, but the changes is mainly affected by the infarction. There is a somewhat better chance of recovering from a T_3 type of thrombosis than from a T_1 type. The little I have said about electrocardiograms does

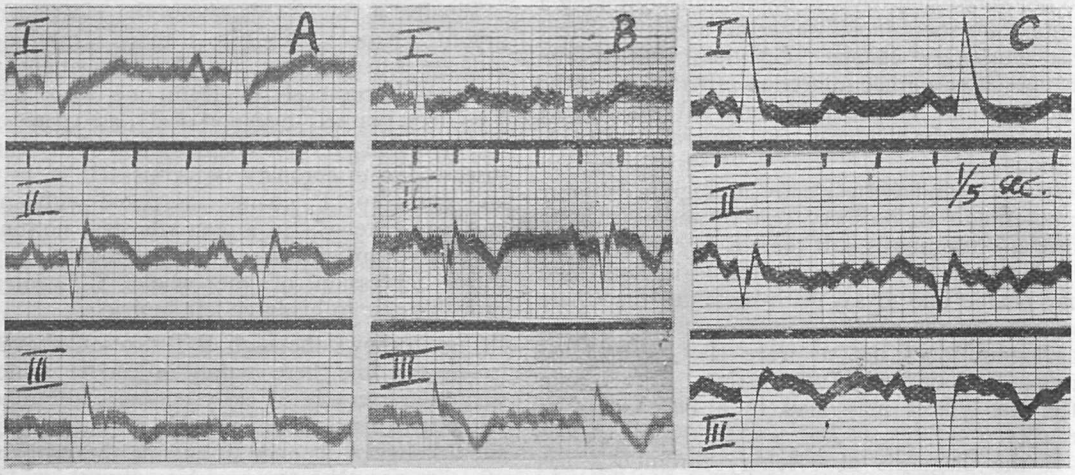


Fig. 3.
(*a*) Elevation of the S-T interval in leads II and III, three days after a coronary thrombosis. (*b*) Sharp inversion of T_2 and T_3 eighteen days later. (*c*) Complete recovery of T_2 and partial recovery of T_3 four years later.

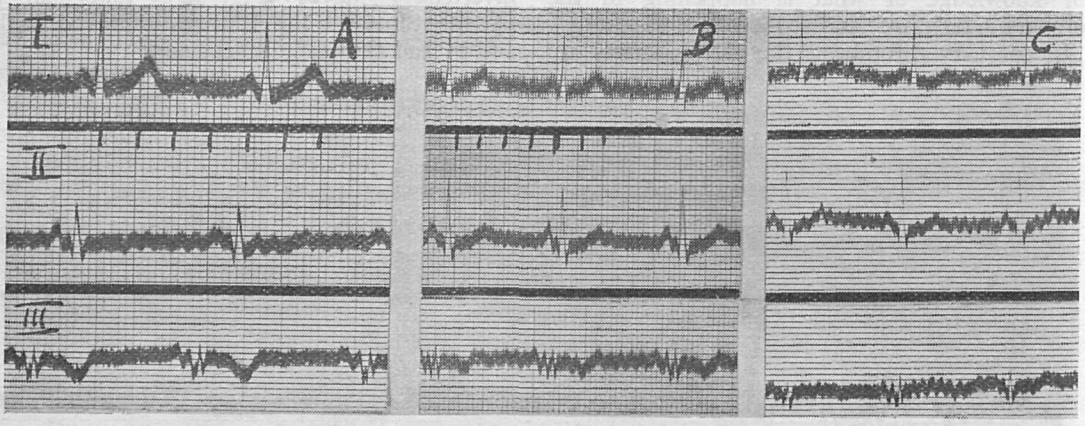


Fig. 4.
(*a*) Sharp inversion of T_3 with flat T_2. This might indicate angina pectoris or a coronary thrombosis. (*b*) Partial recovery of T_3 five months later, indicating that it was due to a coronary thrombosis. (*c*) More complete recovery after one year.

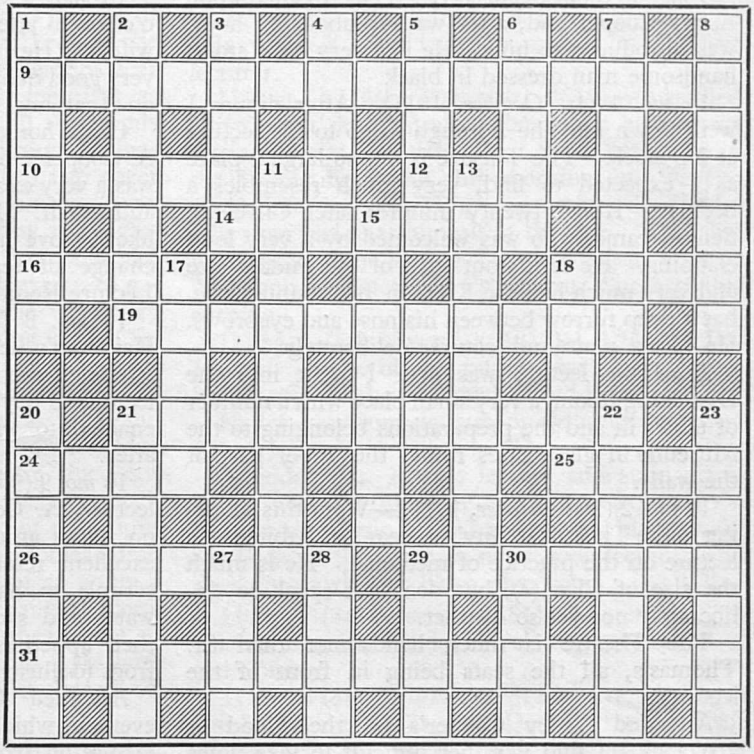
shown in Fig. 4*b* and 4*c* prove that it was a thrombosis.

Where there are T_1 changes, the apex and the anterior parts of the heart are affected, and where there are T_3 changes the posterior part of the heart not mean that they are not of the greatest interest and value, but I want you to realise that they are only one part of the subject and that there is a very clear clinical picture.

(*To be continued.*)

Crossword No. 4

By "Pepsin"



ACROSS

9. Complaint of the Ancient Mariner? (4 words—5, 2, 3, 5).
10. Sugar.
12. Eye in peacock's tail.
14. Mode of travel.
16. Can't hear.
18. Muscle extract.
19. Opaque swelling.
21. What a noise a stone car makes! (2 words—6 and 5.)
24. Star turn.
25. Information received.
26. Pain in this passage.
29. Was once, now no more.
31. Disease once occurring in Cornwall.

DOWN

1. Wrap the body firmly, plus the inside.
2. Showy.
3. Murmur.
4. Prefix for 9.
5. Atavistic when backed.
6. Turkish sailor built this holy place.
7. In spite of its enticement at the end, did not succeed.
8. Result of cold in the head.
11. (Anag.) Met to read.
13. Make stones, I reckon.
15. Born at the end of the afternoon.
17. Bone slope.
18. Mild.
20. One part makes many shapes.
21. Onslaughts.
22. Soil.
23. It's the songsters inside that make me sweet.
27. Healthy.
28. Semicircular recess of vegetable origin.
29. Act or it may keep you out.
30. Puzzle found around cigarettes.

NOTES TO No. 3

6a. Tide-mark.
10a. Anag., "in a star."
11a. Sounds like filter.
14a. End—uring.
26a. Epi—tome.

5d. Sept+I+C.
9d. Fir+staid—First Aid.
24d. Teg=get backwards, *i.e.*, get-up.
25d. Stag-horn calculus.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 5th September.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 3: A. Gordon Taylor, St. Albans.

SOLUTION No. 3

P	R	O	U	D	F	L	E	S	H	■	T	I	D	E
R	■	S	■	I	■	I	■	E	■	F	■	N	■	L
A	R	T	I	S	A	N	■	P	H	I	L	T	R	E
M	■	E	■	C	■	I	■	T	■	R	■	E	■	M
■	H	O	U	S	E	M	A	I	D	S	K	N	E	E
H	■	I	■	■	E	■	C	■	T	■	S	■	N	■
E	N	D	U	R	I	N	G	■	P	A	T	E	N	T
M	■	■	■	E	■	T	■	S	■	I	■	■	■	A
I	N	S	U	L	A	■	D	O	D	D	E	R	E	R
S	■	C	■	A	■	E	■	L	■	■	■	H	■	Y
P	L	A	S	T	I	C	S	U	R	G	E	O	N	■
H	■	B	■	I	■	Z	■	T	■	E	■	N	■	S
E	P	I	T	O	M	E	■	I	■	T	A	C	I	T
R	■	E	■	N	■	M	■	O	■	U	■	H	■	A
E	A	S	Y	■	M	A	I	N	S	P	R	I	N	G

The Diary of a Guy's Student, October-November, 1811

9 *mo.* 30 (30*th September*, 1811).—I called upon Astley Cooper and, after waiting about an hour, was introduced to him. He is a very hale, stout, handsome man dressed in black.

10 *mo.* 1 (1*st October*, 1811).—After dinner I went down into the Borough to go to the lecture at 2 o'clock. The Theatre is not so large a place as I expected to find, very much resembles a beehive. About twenty minutes later Clive (?), Senior, came, who was welcomed by a very loud clapping. He is a stout man of the middle size and very much like the King in his countenance, has a deep furrow between his nose and eyebrows. He speaks plain and lectures deliberately.

After the lecture was over I went into the Dissecting Room, a very small place with a number of tables in and the preparations belonging to the Museum in glass cases round the upper part of the walls.

10 *mo.* 2 (2*nd October*, 1811).—Went this morning to the Theatre at Guy's to hear Dr. Babington's lecture on the practice of medicine. He is much the size of Clive (?), but does not speak so deliberately nor yet so distinct.

The Theatre is much handsomer than St. Thomas's, all the seats being in front of the lecturer.

Attended Astley Cooper's on the Blood at 2 o'clock. I find it rather difficult to take notes in shorthand. Cooper is a very good lecturer if he was rather more methodical. He lectures without notes.

A lecturer should endeavour to keep the attention of the pupils solely upon the immediate subject of the lecture. I observed to-day that when A. Cooper was describing the disease in a horse's trachea, he called the horse a poor devil, upon which most of the pupils laughed, which diverted their attention from the subject of the lecture. An innocent joke may answer very well in keeping upon a dry subject, but they should be avoided as much as possible in lecturing upon subjects where the health of people is concerned.

10 *mo.* 3 (3*rd October*, 1811).—Attended A. Cooper's lecture on enteric. He speaks through his nose very much and has a broad provincial way of pronouncing some of his words.

10 *mo.* 5 (4*th October*, 1811).—Attended Astley Cooper's lecture on Diseases of Arteries and Veins. The Theatre was much fuller than it has been before. This was a good, practically instructive lecture.

10 *mo.* 5.—Attended Cooper's lecture on Absorbents.

10 *mo.* 7 (7*th October*, 1811).—Set off at 8 o'clock to attend Dr. Haighton's lecture on Midwifery. He is a little fellow in spectacles, but a very good deliberate lecturer. Went to the lecture on Anatomy.

Came home and drank tea and set off to hear A. Cooper's lecture on Surgery at 8 o'clock. This was a very excellent lecture and lasted for an hour and a half. The Theatre was quite full and was like a stove in the gallery. Felt very much the change of temperature on coming out of the Lecture Room.

10 *mo.* 8 (8*th October*, 1811).—Attended Dr. Haighton's lecture. He is a very dry fellow. Attended the lecture at 2 o'clock. Dined before lecture to-day and found that I was much better enabled to write my notes out than by dining after.

10 *mo.* 9 (9*th October*, 1811).—At the anatomical lecture, A. Cooper had to try some experiments on living animals, and on this he made a very excellent remark that some epicures who don't scruple to have lobsters put alive into boiling water and skewers run through them to satisfy their appetites would think him cruel in cutting frogs to illustrate some material point of anatomy.

Attended Cooper's surgical lecture in the evening, which was very full, and we had a good lecture on Irritation.

10 *mo.* 10 (10*th October*, 1811).—Arose a little before six, wrote the remainder of Cooper's Surgical lecture out and went to Dr. Haighton's at eight. Some of the pupils begin to straggle in at half-past. . . .

. . . I had to run from their house in order to get a seat at Cooper's; the lower part was quite full and I went up into the Gallery.

10 *mo.* 11 (11*th October*, 1811).—Went to the lecture on Midwifery, but Dr. Haighton was engaged and could not come.

Attended Cooper's lecture at 2 o'clock. The Theatre was very full and continues to get fuller. We had a short lecture to-day on the Bones.

10 *mo.* 13 (13*th October*, 1811).—We passed by the London Hospital. It does not appear so large as St. Thomas's on the outside and more resembles our Infirmary in shape. Passed by the Jews' Hospital for the Aged and Blind. A number of Hebrew words are inscribed on the front and dated A.M. ——.

10 *mo.* 14 (14*th October*, 1811).—I had to make haste to Guy's; when I got there Dr. Hayton had begun about five minutes.

Went to the Anatomical lecture at 2 o'clock

and the Surgical at eight. The room was extremely hot and crowded, and Cooper seemed quite overdone with lecturing twice a day.

10 *mo.* 15 (15*th October*, 1811).—Went to Dr. Hayton's lecture at eight. I dined and then went to the Lecture Room. After we had been in the room about a quarter of an hour and perhaps near 70 pupils come, an operation for aneurism at Guy's was announced, and almost all the pupils set off running as hard as they could to get a place in the Operating Theatre. I went as I had never seen this operation before. The room was soon full. It is a very lofty room lighted by a skylight, and seats all up to the top almost. As soon as the operation was over, there was another race to get a seat in the Lecture Room. People were very much astonished to see such running across St. Thomas's Street.

10 *mo.* 16 (16*th October*, 1811).—Attended Dr. Hayton's lecture at 8, the Anatomical at 2, and the Surgical at 8 in evening. A number of air-holes have been made in the Theatre since last 2nd day. But they did not seem to have much effect. It was extremely hot. One of the pupils came with a great coat and silk handkerchief round his neck to put on after going out of so warm a room. He was known to a great many of them, and, upon seeing him, the whole theatre set to clapping and stamping for some time. He bore the joke with very good nature and turned off very dryly with, " Well done, lads."

10 *mo.* 17 (17*th October*, 1811).—Went to Dr. Hayton's lecture at eight. Went through the area of St. Bartholomew's Hospital. It is composed of four large stone buildings surrounding a very large yard.

10 *mo.* 18.—Attended the lectures.

10 *mo.* 22 (22*nd October*, 1811).—Attended Dr. Hayton's and the Anatomical lecture. Attended also Mr. Allen's lecture on Experimental Philosophy. He is a very pleasant-looking man speaking audibly and with elegance. The Theatre was fuller than it had been before this season.

10 *mo.* 26 (26*th October*, 1811).—H. Clive, Junr., gave us a lecture upon Making Anatomical Preparations, and as good a one as the subject would admit of. He is not at all calculated for a lecturer, and has a very low voice.

10 *mo.* 28 (28*th October*, 1811).—Arrived in time for Dr. Hayton's lecture. Had no anatomical lecture in consequence of not having a subject for the muscles. Went to the Surgical lecture in the evening.

10 *mo.* 30 (30*th October*, 1811).—Went Dr. Hayton. We had an Anatomical lecture upon the membranes of the brain to-day.

Attended A. Cooper's lecture on Surgery.

11 *mo.* 1 (1*st November*, 1811).—Attended all the lectures; had a very excellent demonstration of the abdominal muscles by Astley Cooper.

11 *mo.* 2 (2*nd November*, 1811).—Attended the lectures. H. Clive, Junr., lectured to-day; he only wants a good voice to make him a clever lecturer.

11 *mo.* 4 (4*th November*, 1811).—Attended Clive's first demonstration, on which he gave us General Rules for Dissecting. Spent sometime in the Dissecting Room this morning and went to Guy's in order to see Travers examine a dead body. The man had shot himself in the side. The slug went through the liver and into the colon, where it was found. Attended Cooper on Surgery this evening.

11 *mo.* 5 (5*th November*, 1811).—Attended Dr. Hayton. Some of the pupils rose to go before he left off, which very much vexed him.

Had a very long lecture on Muscles to-day—Clive, Junr.

Attended Mr. Allen's lecture and staid afterwards with C. Flint to hear Dr. Cholmely on Theory of Physic. He hardly takes his eyes off the book all the while, is not a good lecturer, and does not much look like a physician.

11 *mo.* 7 (7*th November*, 1811).—Attended both the lectures and Henry Clive's Demonstration of the Spine.

11 *mo.* 8 (8*th November*, 1811).—Attended both the lectures and Travers's Demonstration of the Pelvis. He is a very good demonstrator and speaks very well.

11 *mo.* 9 (9*th November*, 1811.)—Attended Dr. Hayton's lecture on Midwifery. We had no anatomical lecture to-day on account of the procession of the Lord Mayor. I went on Blackfriars Bridge when he had just embarked to go down to Westminster. There were several very handsomely gilded barges; the Mayor was rowed by men dressed in red. I walked through the crowd over the bridge and had a view of the carriage. It is painted red and has a great deal of gold about it. It looks a clumsy thing not much resembling a modern carriage, but more like a car having windows all along the side so that we could see everybody that was in the carriage. It is said to be sixty years old.

In the evening I went to the Physical Society at Guy's Hospital, which afforded me a great deal of instruction and amusement. The paper was a new theory on air. It had been discussed five nights before and I could not understand much of the author's theory, so small a part of the paper being read this evening. He wished to prove that there was no such thing as gravity in the air, but all by elasticity, which he attempted

to prove in various ways, particularly by the breaking of a bladder over a vessel under a glass basin so as to prevent the action of perpendicular pressure.

Dr. Birkbeck was one of his opponents; he speaks very well and makes long speeches. He had to illustrate the variation of the thermometer on being called upon by one of the members.

Dr. Walker, the Gazeteer, was there; he makes many dry remarks, but does not look much like a M.D. An old man of the name of Young behaved very bad in abusing the name of a young man there of Hardy, which was very well retorted by him.

When a motion is made and seconded it is always put. Everybody stands up when speaking and addressing the President.

A gentleman of the name of Hutton made the following remark, that the particles of air were like a fashionable man and wife who constantly endeavoured to repel each other, but were kept together by the laws of gravity, which were those of matrimony. The discussion is carried on very warmly.

11 *mo.* 11 (11*th November*, 1811).—Attended the three lectures and Travers's Demonstration. He was seized with hæmoptoe, and obliged to leave off very soon, so that we crossed over to St. Thomas's and heard Henry Clive. He had not begun long, so that I got two demonstrations.

11 *mo.* 12 (12*th November*, 1811).—At 9 I went to the Medical Theatre at Guy's to see the effects of the inhalation of nitrous Oxyde gas. In some it produced the most violent motion of the body and limbs for about a minute, when it entirely abated and produced perspiration. If the person was not held he would fall down as though in a fainting fit. The effect was different upon different persons.

11 *mo.* 15 (15*th November*, 1811).—Attended the lecture; began to dissect an upper extremity. It is now getting blue, but not very fast. Some of the subjects keep much better than others. We had this evening the opportunity of using the forceps in Dr. Hayton's machine; he is too cross and does not make sufficient allowance for young beginners.

11 *mo.* 16 (16*th November*, 1811).—Attended both lectures and went in the evening to the Society at Guy's. The discussion was upon a paper on Hydrophobia. Dr. Birkbeck in the Chair. The name was first objected to because patients dislike other fluids as well as water, to which Dr. Birkbeck replied that, as water was the largest of all fluids, we use the term on that account. Dr. Walker observed that there was not only the dread of water, but anything that reflects, as a watch, etc. It was said that man could not communicate the disease to man. Dogs, pigs and horses might communicate the disease to each other.

It is the practice in some countries to unvirus the dogs by taking a something from under the tongue.

The typhoid poison remains about the clothes of the man some time after the person has been dead. The poison of a rattlesnake remains on the fang after the animal has left it. An instance occurred in America where a man was bit through his boot by a rattlesnake. He was taken ill and died. The boots came into the possession of another person, who also died of the disease, and so a third, and on examining the boots the fang was found in them.

An epidemic disease is that which is caught through some effluvia in the atmosphere, and contagious from contact with the person's effluvia.

A patient who received an injury upon the great toe had great symptoms of hydrophobia, but recovered.

The matter of variola and vaccine is soon destroyed from taking its proper effect, if applied to a very low temperature or not taken from a proper pustule or one that has gone rather longer than seven days.

Children have been innoculated for the smallpox from children that have died of the disease and been some time dead, and have taken the proper effect.

A great deal is said upon the hydrophobia in the *Mémoires de la Société Médicinale de Paris.*

It is more frequent in the South of France than other countries. Seldom occurs in Constantinople.

Dr. Letsome thinks that the only method of curing it is by excision of the part; nothing short will do.

11 *mo.* 23 (23*rd November*, 1811).—Attended all the lectures and demonstrations. Went in the evening to the Medical Society of Guy's. A case of suppression of urine was read, of a lad on board a King's ship who had voided no urine for . . ., which on coming ashore got quite well. It was suggested whether there was not a deception practised, which was the case in a young woman at the hospital who kept a tin pot under her pillow and drank her urine. It appears that, in suppression of urine, the perspiration would have had urinous smell, which was not the case in that mentioned on board the King's ship.

The remainder of the paper on Hydrophobia was read; there were not made many new remarks. Dr. Letyom (?) was there, and spouted Latin once or twice.

11 *mo.* 25 (25*th November*, 1811).—Attended a lecture and demonstration. In the evening A.

Cooper recommended to the students the formation of a Society similar to the Royal Medical Society in Edinburgh to be constituted entirely of students. He said that he derived more advantage from that society than from the professors, without derogating from their merits.

11 *mo.* 27 (27*th November*, 1811).—Attended the lectures ; no demonstrations to-day.

Observed two good dissections for some time to-day, the dissections being slowly but very carefully done and leave no fascia upon the muscle, and the double-edged knives always endeavoured to stretch the muscle.

11 *mo.* 28 (28*th November*, 1811).—Attended the lectures and demonstrations to-day.

Went in the evening to Dr. Hayton's machine to try the foot and breech case. The old doctor was not so cross as he usually is.

11 *mo.* 29 (29*th November*, 1811).—Attended Dr. Hayton's lecture.

In the Dissecting Room I watched a young beginner dissect the right oblique ascendus abdomonis. It is very thin at its junction with the tendon, so that the oblique ascending was exposed in two or three places.

Saw part of a demonstration of the brain by one of the students. It is necessary to be very careful in taking off the skull-cap or you very much misplace the brain.

The solution of arsenic has been found of great service in intermittent fevers, giving the quantity of 60 grs. in 24 hours in a decoction of bark. We had no anatomical lecture on account of so many operations at Guy's.

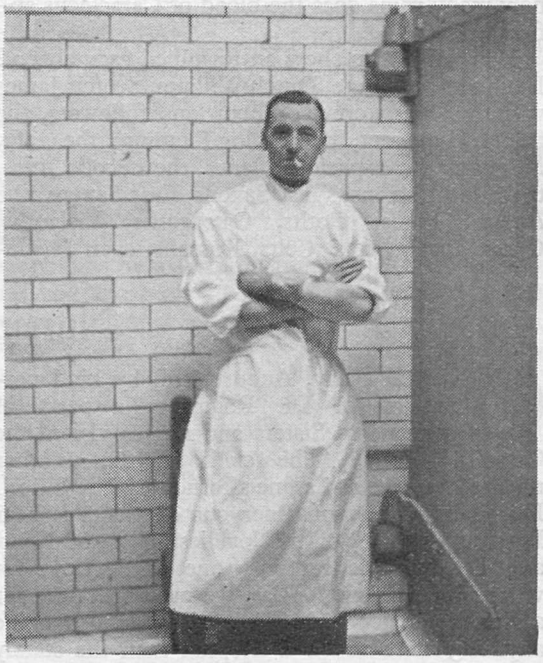
Guy's Faces

No. 2—" GIBBS "

ARTHUR GIBBS was born in 1883 in Holborn, and was educated at the Church School, St. Albans. At the age of sixteen he became a railway clerk at St. Pancras, but left after three years and joined the R.A.M.C., with whom he served at Aldershot, Woolwich and the Millbank Hospital. He left the R.A.M.C. in 1907 and became a male nurse and pathological assistant at the City Lodge Hospital, Cardiff, where he remained till 1914, when he was called up as a reservist to serve with the R.A.M.C. He crossed the Channel on August 23rd and was posted to the 12th General Hospital, then at Rouen. This was evacuated after Mons, and with it Gibbs shipped to Nantes, in Brittany, but after the first battle of the Marne he returned to Rouen, where he worked till November, 1916. He was then sent, as Regimental Sergeant-Major, to be steward of a large hospital at Taranto, in Italy, where he was responsible for the catering and equipment of the personnel.

He was demobilised in 1919, and came to Guy's as Post-Mortem Assistant, the job he has had ever since. He learnt his Anatomy and Physiology in the R.A.M.C., and first opened a body in 1908. He is married, and has one son, aged eight. His hobbies are swimming, cricket and watching football.

During the last twenty years Gibbs has worked with four Professors of Pathology and many demonstrators. Pathology is now better and more systematically taught than when he came here, but one observation remains the same : the students



who go most often to the Post-Mortem Room are always the most successful later on.

Correspondence

"Justification for Knavery"

To the Editor of the GAZETTE

SIR,—To O. Hal for his letter published by you on the 29th July, Bravo !

This Hospital has been subjected too long to hosts of undesirable aliens, but why does he spend so much time and paper upon a comparatively insignificant threat to British survival when boats from Africa, buses from Wales, trains from Scotland and aeroplanes from the Orient pour a ceaseless, unremitting stream of foreigners into Guy's Hospital itself, the heart of British culture ?

In the restaurant these invaders with studied arrogance flaunt unmelodious tongues in our faces. Badinage in Afrikaans, Gaelic, Cambra, Swahili, Sikh and Mongolian reverberates. How often is even Billingsgate English heard ? In the dining-hall brogues and burrs and other outlandish cachinnations unite in glib inconsequence to drown the sonorous language of Keats and Shakespeare, making the champ of native jaws scarcely audible above their clamour.

But what of those so-called Britons who are but whited sepulchres, hiding beneath the cloak of complacency their inner spuriousness ? In how many veins does the blood of Caractacus still flow ?

How many can show an unsullied escutcheon ? Hanoverian George, Dutch William, Scotch James with his lousy crew of luxurious followers, the fleeing Huguenot, the weaving Flemings, the crafty Normans, the rapacious Danes, the bucolic Jutes, the South Saxons, West Saxons, East Saxons, the Angles, Huns, Goths, Ostrogoths, Visigoths, Gauls, Picts, Scots, Celts, Romans, even Phœnicians and other barbarians have submerged, diluted, polluted British Blood, till, as Daniel Defoe says :—

Thus from a mixture of all kinds began
That heterogenous thing an Englishman ;
In eager rapes and furious lust begot
Between a painted Briton and a Scot ;
Whose gendering offspring quickly learnt to bow
And yoke their heifers to the Roman plough ;
From whence a mongrel half-bred race there came,
With neither name nor nation, speech or fame ;
In whose hot veins new mixtures quickly ran,
Confused between a Saxon and a Dane ;
Whilst their rank daughters to their parents just
Received all nations with promiscuous lust.
This nauseous brood directly did contain
The well extracted blood of Englishmen.

Blood-conscious members of the race must rally to the cry :—

Back to Brython !
On to Stonehenge !

On the sacred groves the mistletoe must be cut again with the golden sickle.

Let us dismiss unwoaded members of the Hospital staff, and drown our sorrows in great horns of mead and methaglin (beer isn't Brythish, Mr. Hal) to great shouts of Druidic mirth.

Each man to his coracle !

Let our sports be truly Brythish, such as burning foreigners and other vermin in wicker baskets. Resurrect the spirit of Boadicea !

Yours, etc.,
TWO SONS OF ALBION.

Guy's Hospital,
S.E.1.

Nursing News

ON Wednesday, August 2nd, by kind permission of Dr. Rogerson, a party of twenty-five Sisters and nurses visited the Cassell Hospital. The clerk of the weather relented, and we had a fine afternoon. The Cassell Hospital for functional nervous disorders is near Penshurst in one of the loveliest parts of Kent, and Penshurst is certainly one of the loveliest villages in England. Alas, we only had time for a glimpse of it. It would be difficult to imagine anything more unlike a hospital than the stately old mansion in such beautiful surroundings.

We were met by Dr. Rogerson, the Medical Superintendent, and Miss Rowe, the Matron.

Dr. Rogerson treated us to an hour of sheer delight as he told us of the special work done in his hospital. We were carried away by his enthusiasm, and were able to understand so easily the problems which confront the doctors and nurses in this particular work. Dr. Rogerson has kindly consented to send a résumé of his lecture, and we hope it may be published in the *Gazette* shortly. It was specially interesting to us to hear of the pioneer work of this kind done by Guy's and Guy's men, possibly the outcome of the terms of the foundation of the Hospital and the wishes of the Founder : "After administering with extensive bounty to the claims of consanguinity,

he established this asylum for that stage of languor and disease to which the charities of others had not reached. He provided a retreat for hopeless insanity and rivalled the endowments of Kings."

After the lecture we wandered through the gardens, visited the occupational therapy department and were entertained to a delightful tea by the Matron and Sisters. F. T.

Reviews

Brompton Hospital Reports. A Collection of Papers recently published from the Hospital. Vol. VII, 1938. Obtainable from the Secretary, Brompton Hospital, London, S.W.3. *Price* 5*s.* 6*d.*

THIS handy-sized volume contains twenty papers of varying lengths by members of the Staff of the Brompton Hospital. All but two of these papers have been previously published in other journals. About one-half of these papers are concerned with research work performed by their authors. Thus F. P. Lee Lander and Maurice Davidson contribute two important and interesting papers on the causation of bronchiectasis. They dispute the now commonly accepted theory that bronchiectasis results from chronic infection of the bronchi, which causes weakening and dilatation of the bronchial walls. They cite evidence which suggests that a certain degree of atelectasis is constantly associated with the onset of bronchiectasis, and that it is the increased negative pressure in the thorax caused by the collapse of part of the lung which sucks out the bronchial walls. Infection is secondary to bronchial dilatation and may not of necessity occur. Finally, they show that the elasticity of the walls of bronchiectatic bronchi need not be destroyed, even when bronchiectasis has persisted for ten years.

W. D. W. Brooks describes an ingenious method for producing collapse in selected areas of tuberculous lung. Clinically it has been observed that tuberculous areas of lung that accidentally become collapsed often heal well. J. E. H. Roberts and R. C. Brock contribute papers on the reasons for and results of the operation of extrapleural pneumothorax. R. C. Brock also contributes an important review of thoracoscopic section of pleural adhesions based on 442 consecutive operations. This is of interest not only to chest surgeons, since the technique of the operation is carefully discussed, but also to physicians, since the type of adhesion which may be sectioned and the results and complications which may be expected from sectioning are excellently set forth.

F. C. Ormerod reviews the pathology and results of treatment of one hundred cases of bronchial carcinoma, and of all the cases of tuberculous ulceration of the mouth and pharynx seen in the last five years at the Brompton Hospital. Clifford Hoyle contributes a valuable paper on chronic miliary tuberculosis.

The other half of these papers deal with cases of and experiences in treating chest diseases. The late E. S. T. Bussell contributes three succinct short papers which might serve as models for all short medical papers. Geoffrey Marshall discusses the question " How long should collapse therapy be delayed? " G. S. Irwin and R. J. McGill describe three cases of lobar pneumonia showing unusual physical signs. W. E. Lloyd discusses the differential diagnosis of hæmoptysis. Clifford Hoyle contributes an excellent article on cardiac emergencies.

This collection of papers may be thoroughly recommended to anyone interested in diseases of the chest.

E. B. R.

A Manual of Practical Anatomy. Part II—The Thorax and Abdomen. By THOMAS WALMSLEY. Published by Messrs. Longmans, Green & Co., London, 1939. Second Edition. Pp. 319, with 132 Figures and 7 X-Ray Plates. *Price* 12*s.* 6*d.*

UPON opening this book the diagrams immediately strike one as good. They are in fact the best part of the work, in spite of the fact that none of them is in colour. There are some unusual sectional drawings and also some good views of dissections. Increased clarity is obtained by using a diagrammatic style of drawing and most of the figures are original. The modern practice of introducing into anatomical works X-ray photographs of normal structures has been adhered to and these plates definitely enhance the value of the work.

The text, however, is very disappointing. In the preface the author states that the book is " primarily a directory of dissection of the human body," but the dissection instructions are so brief and so well mixed in with the rest of the matter that it is difficult to pick them out at all. One gets the impression that the student is not being led to a knowledge of anatomy *through* a knowledge of the dissected parts, but that dissection is a means of verifying (if the student is keen enough) some of the points raised in the text. Perhaps that is why the somewhat dictatorial " The student

is now to make an incision " appears instead of " Now make an incision," in order to lend force to the poor instructions.

The rest of the book suffers from the introduction of too many scraps of physiology, embryology and clinical medicine, which are inevitably keeping out the far more valuable dissection instructions. Surface anatomy is present, but insufficiently prominent, and the book falls between two stools, as it is neither a textbook of anatomy nor a manual of practical anatomy.

Incidentally, the handle of the knife is recommended for " blunt " dissection, a practice as loathsome to the anatomist as it is to the surgeon.

For the diagrams alone the book is possibly worth its price, but it cannot be recommended to a new student as a guide to his future dissections.

L. C. T.

Sport

Cricket

GUY'S *v.* OLD WHITGIFTIANS

THE Hospital were badly beaten by the Old Whitgiftians on Saturday, July 29th, at Croydon. The home side batted first and scored 301 for 3; they then dismissed Guy's for 133.

This heavy defeat was chiefly due to some lamentable fielding and partially to a rather weak Hospital batting side.

H. R. Bennet and J. W. Harrison both scored centuries for the Old Whitgiftians. Bennet was dropped before he had scored, and before he reached his century he had several more escapes. Harrison also gave one or two chances, but towards the end of his innings he batted very well.

With the score at 301 for 3 wickets the Old Whitgiftians declared.

Guy's started their formidable task well by scoring 72 before the first wicket fell. O'Gorman and Morey both played the bowling confidently, each hitting a six. Morey batted well for his 29, and O'Gorman was unlucky not to reach his half-century after playing well for 46.

The bowling of the Harrison brothers was too good for the rest of the Guy's batting. But Winston defended stoutly and McClintock again showed that he is capable of wagging the somewhat rigid Hospital tail. Guy's were all out for 133.

Scores.—Old Whitgiftians, 301 for 3 wickets (Winston, 1 for 25; Skea, 1 for 59; McClintock, 1 for 69; Morey, 0 for 31; Knight, 0 for 54; O'Gorman, 0 for 56).

Guy's

G. O'Gorman, b. Harrison (G.)	46
L. G. Morey, c. Chandler, b. Harrison (G.)	29
R. L. Skea, b. Harrison (J.)	4
G. H. G. Chase, st. Ling, b. Wright	6
H. L. Joyce, b. Harrison (G.)	0
J. D. Winston, b. Harrison (J.)	5
D. N. Fuller, l.b.w. Harrison (G.)	8
D. C. Boyd, st. Ling, b. Harrison (J.)	3
J. R. Lauder, c. and b. Harrison (J.)	0
C. L. T. McClintock, not out	23
J. H. H. Knight, b. Harrison (G.)	0
Extras	9
Total	133

Hospital Information, etc.

Notices

MEDICAL SCHOOL
DIPLOMA IN ANÆSTHETICS

A Course of Instruction in preparation for the November Examination for the Diploma in Anæsthetics of the Conjoint Examining Board in England will commence on Monday, 16th October, provided that there is a minimum number of seven entrants. The Course will cover a period of three weeks and will include lectures in Physiology, Anatomy, Pharmacology, Clinical Investigations and Anæsthetics.

The Course will be open to men and women graduates. The fee for the Course will be £15 15*s.* 0*d.*

Further information may be obtained from the Dean, Guy's Hospital Medical School, London Bridge, S.E.1.

Change of Address

C. H. Blockley, L.D.S., R.C.S., Northwestern University Dental School, Chicago Avenue, Chicago, Illinois, U.S.A.

Appointment

Gavin Thurston, M.R.C.P., D.C.H., Visiting Medical Officer to the L.C.C. Residential School for Mentally Defective Boys, Ongar, Essex.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

WE are at war, and under that prime necessity Guy's has accommodated itself to a new environment quicker and more easily than could have been thought possible. At the time of writing, no Air Raids have occurred, but two false alarms (one at 2.30 a.m.) have given everyone an opportunity of learning some of their new duties.

Guy's is now a casualty clearing station of about 250 beds, whose function it is to feed the base and advanced base hospitals of the South-Eastern Sector of London. The Surgical Block is closed, all in-patients are to be in the lower wards of the Medical Block, and the Out-Patients' Hall is cleared of its benches and reconstituted as a reception room for the sorting out and first treatment of casualties.

The first sign of abnormality in the Hospital appeared on Saturday, August 26th, when students were invited to dig trenches in the Park, under the supervision of the Works Department. These were in the form of a W, with entrances at the Medical School, Medical Block and Nurses' Home. The work was admirably done, with such keenness that the free beer supplied by the Acting Superintendent lasted longer than had been budgeted for. The digging was finished by Tuesday; on Wednesday the old iron chimney of the Laundry, which was replaced a short time ago by a concrete one, was removed from its resting place in the Works Department and cut into sections, and these hemi-cylinders were used as roofing. On Thursday and Friday the roofing was completed and the final covering of sandbags and earth applied. The entrances have now been heavily sandbagged and all is ready.

The patients were evacuated on Friday, September 1st, stretcher cases going to Brighton and walking ones to their own homes by car. By the evening there were only 27 cases left in the Hospital. The same evening the first baby was born in Salomons Centre, and the new theatre under Out-Patients was christened with an appendicectomy.

The Hospital staff has dispersed to the six main hospitals of the sector—Guy's, Farnborough, Orpington, Pembury, Dartford and Grove Park. At Guy's, there are left some thirty qualified men, under the command of Mr. Cook, with Dr. Bishop as Deputy Superintendent, about 120 students, 130 nurses and 100 of the Administrative Staff, including Almoners and members of the Works Department. The doctors luxuriate in the marble halls of Nuffield House; the students are at the moment in the College or sleeping in the surgical wards—they are to take up permanent residence in the Nurses' Home when it has been made ready for them. Meanwhile the Front Surgery continues as usual, and Medical and Surgical Out-Patients are seen daily at 10 o'clock. Lectures have been organised, for the qualifying examinations are to be held as usual.

It is our earnest hope to be able to continue publishing the *Gazette*, whatever may happen. For this we need the co-operation of our readers. By the next issue we hope to be able to report news from the other hospitals "down the line," but, in addition to this, contributions will be needed of Medical, Surgical or Lay interest. The next few months are likely to provide experiences that will be worth recording. Send your articles then to the Editor, the *Guy's Hospital Gazette*, Guy's Hospital, S.E.1.

It has been found necessary slightly to diminish the number of pages in the *Gazette* for the present. For this reason, the Indenture of the Guy's Student of 1811 and the latter part of Dr. Campbell's Clinical Lecture are held over till the next issue.

No Crossword appears this week, but the series is to be continued. The winner of Crossword No. 4 is Mr. A. Gordon Taylor, of St. Albans.

Will readers who usually have their *Gazette* sent to them from the Gazette Office, kindly inform the Gazette Manager of any change of address.

Angina Pectoris and Coronary Thrombosis

II.—TREATMENT AND PROGNOSIS

A Lecture delivered at Guy's Hospital on December 2nd, 1938, by Maurice Campbell, O.B.E., M.D., F.R.C.P.

SOME weeks ago I spoke to you about the diagnosis of angina and coronary thrombosis, and to-day I want to go on to the treatment and prognosis of these two conditions. They may be considered together for diagnosis, but from the point of view of prognosis and treatment it is easier to take them separately; I am going to take coronary thrombosis first because it is a more simple entity than angina pectoris.

A.—TREATMENT OF CARDIAC INFARCTION

Rest and Relief of Pain

When you see a patient with coronary thrombosis the two immediate things are rest and relief of his pain. You sometimes find nitrites being used for the latter, because the patient who has had ordinary angina preceding the infarcts has probably grown accustomed to use these for his anginal pain and recognises this as something similar. But this is one of the conditions under which nitrites should never be used, because already there may be some fall of blood pressure, and a further drop may seriously embarrass the heart and lead to attacks of acute pulmonary œdema.

Generally the pain is of great severity and you will find nothing except morphia useful, and it is rarely worth trying other things first. As a rule, unless you are dealing with somebody who is small or unusually feeble, you should start with a quarter or even half a grain of morphia; some indication of the severity of the attack will be given when you see whether the pain is relieved by a single injection or if second or third injections are called for, and this may give some clue to the prognosis at once.

In the ordinary attack where the pain is not exceptionally severe and does not last more than a few hours—probably the case where the area involved by the infarct is not very large—one, or at the most two, injections will be sufficient, and after them the patient will be relatively comfortable. If the pain continues to be severe in spite of two injections, you are generally dealing with an unusually large area of infarction, where even the immediate prognosis is very much more grave.

Most patients like to move about during the acute attack, and I do not think you want to interfere with this too much; if he is much more comfortable upright he should stay so, but as soon as the pain is alleviated the period for real rest begins, and there is no doubt that this should be for six weeks. It is necessary for patients to realise that this period is not too much for a thrombosis of an artery in the heart, when many of them would be ready to rest this time for a venous thrombosis in the leg—a point you may find useful in persuading them to have this rest. If the infarct is small they may feel well so quickly after the thrombosis, and in addition there is nothing for them to see on the surface, that they are inclined to think a few days' rest is adequate.

The immediate treatment is really summed up by adequate dosage of morphia to relieve the pain and a decision that there is to be six weeks of rest in bed.

Recurrent Pain, Heart Failure, and Changes of Rhythm

Recurrent Pain.—A good many other points may come in, but they vary from case to case according to the symptomatology. The three things that are most likely to call for treatment during this immediate period are some further manifestation of pain, some sign of cardiac failure, or some change in the cardiac rhythm, because all these are of frequent occurrence after ordinary attacks.

The first thing that is likely to give rise to further pain is pericarditis, and this will cause pain of rather similar position and type, but of course it will be long continued and is rarely very severe. When you hear on the second day after the thrombosis that the patient has pain again it may be a second thrombosis or a spread of the original one with a grave outlook, or it may be the much less serious development of pericarditis which is really part of the original attack and does not add much to the gravity of the prognosis. Morphia will not usually be needed for this pain and local applications are generally a help and milder sedatives can be used. If, however, the patient is failing to sleep, it is much better to give morphia or some adequate sedative.

Heart Failure.—The second occurrence which often calls for treatment is some sign of failure. This may be the ordinary congestive type of failure which may develop very quickly after coronary thrombosis; it needs treatment with digitalis in the same way as ordinary failure. If

it is urgently necessary to get some effect it is advisable to use digoxin, otherwise the patient can be put on to digitalis.

In the ordinary way giving digitalis to a patient liable to angina may increase the tendency to attacks of pain, and therefore you must watch carefully when you give the digitalis lest it should do this. In general, digitalis is not indicated when there is cardiac pain; it is either without effect or sometimes actually harmful, and therefore it is rather exceptional when you find this form of treatment called for in the treatment of cardiac pain.

The other type of failure which may occur is left ventricular failure with cardiac asthma, where the patient wants to sit up and is unable to lie down because of his dyspnœa. Here the continued treatment with morphia and atropine during the first week or so after the attack may be helpful; if this condition goes on for longer than a week or ten days it is rarely the immediate result of the thrombosis, and probably means that the heart muscle as a whole was already so bad that the patient would be getting these attacks in any case, and the prognosis becomes worse. He must then be regarded as having left ventricular failure as well as recent coronary thrombosis.

Sleep is most important, and it is very useful to employ the ordinary mild sedatives. They may save him from further attacks of pain and prevent the need for further treatment with morphia. Although there are a large number of sedatives of all types, on the whole you will find the old-fashioned bromide, with or without chloral and sometimes perhaps with sodium luminal, as good as anything, and this will frequently be of very great help to the patient in the first week or two after the attack. Rectal paraldehyde is an excellent safe hypnotic when it is felt that more morphia is undesirable. Although it is most important that adequate sedatives should be given to obtain sleep and to prevent pain, no more than is necessary should be given.

Changes of Rhythm.—A third common complication is some change in the heart rhythm: fibrillation, or flutter, or simple paroxysmal tachycardia. These are fairly frequent in the two or three weeks after coronary thrombosis. If they last for an hour or two they are of relatively little importance apart from the discomfort, but sometimes they last for days and precipitate cardiac failure when the heart muscle is really good enough to avoid failure if it could be kept at its ordinary rhythm.

In fibrillation and flutter adequate digitalisation is indicated. In these cases ventricular paroxysmal tachycardia is much more frequent than other types of paroxysmal tachycardia and can generally be stopped by quinidine. Quinidine, unlike digitalis, is bad for the heart muscle itself, and is only of value for its effect on rhythm. It is justifiable to use it quite soon after coronary thrombosis if there are paroxysms of flutter or of simple tachycardia that is thought to be ventricular. In many cases one can go up to the full dose of 10 grains three times a day, though one must realise that one is using a dangerous remedy which is only justifiable if the effect of the paroxysms is to put the patient in great danger. It will certainly save life in some cases if attacks of this type can be stopped.

Embolism After Cardiac Infarction

These are the only things in the immediate treatment which I would like to stress as the principal complications that should be borne in mind. There are many other things that might happen, and I will only remind you of the likelihood of embolism. One of the many reasons for keeping the patient in bed is the risk of embolism after coronary thrombosis, and, unlike the emboli from thrombosis in most parts of the body, these may be either on the right side or on the left side of the circulation. Consequently one may get pulmonary or systemic emboli, because very often the interventricular septum near the apex of the heart is involved and there is infarction and thrombosis inside both the right and left ventricles.

Cerebral and mesenteric emboli occur as well as the more common pulmonary and systemic sites, and occasionally one may have the unfortunate experience that the patient makes a good recovery from his cardiac infarction but is left with hemiplegia from the cerebral embolism that arose as a complication. Apart from the rest in bed, and keeping the patient quiet but not too drowsy, and the general treatment of his cadiac failure, there is nothing else one can do to prevent an embolism. Luckily, they do not occur in the majority of cases. Perhaps one case in six or ten may have some embolic manifestation, but often it will be a relatively minor upset.

Later Treatment

Coming to the treatment of the later period, another six weeks should generally be spent in increasing the patient's activity gradually. We do not want him to be living anything like a normal life until three months have elapsed. With most people I do not think a longer rest than that is desirable, but if the work is strenuous or the patient is of the type that you feel will not go back to easy work, or has not the capacity for taking things easily—and there are many people

like that, even doctors who should know better—one ought to lengthen this period beyond the three months. The main thing, however, to guide us in the later period is how much he is able to do without provoking anginal pain or congestive failure. This is really the measure of his degree of recovery, and most after-treatment at this stage can be left until we discuss the treatment of angina.

One point I would stress here is the question of recurrence. Is he likely to have a second coronary thrombosis? We can say that in the near future it is an unlikely event. If one branch of the coronary artery has been so narrowed that it is likely to become completely occluded, that will almost certainly have happened during the time of his worst illness when the circulation was at its worst.

It is not uncommon to get a second thrombosis a few days or a week or two after the first. If, however, he has survived this period and his circulation has improved, it is probable that there is no other branch of a coronary artery that is likely to get complete obstruction in the near future. But measured in years this does not apply, and a recurrence is one of the risks to be considered.

Two common and interesting questions that often turn up in connection with these people are what they should do in the way of exertion and whether they should be allowed to drive cars. Exercise should be gauged by the ease with which anginal pain is provoked. If a man can play golf without getting angina it is a pity to rule the game out on any general considerations. I applied this last week to a patient who has put on over two stone in weight since his golf was stopped. I think the risk to him of playing golf will be less than the risk from putting on so much weight. In this sort of way one has to take a great many points into consideration.

Some people think that with a patient who has had a cardiac infarct the risk is too great for him to drive a car again, because he might have a second attack which would involve accidents to other lives as well as his own. I think the risk is very small, and I have seen several people who have had a coronary thrombosis actually while in the car, and in none of these has there been an accident. I know that I should be less likely to hear about them if there was such a result, but I am not aware of many accidents which have been proved or even suspected to be due to this type of attack. Epilepsy has been quoted as a parallel, but there, of course, the attack comes so suddenly that complete loss of control is probable. While patients are quickly incapacitated by coronary thrombosis, this does not take place so quickly that they have no time to take some action, and in most patients, if an attack occurs in the car, there is time to draw it up to the side of the road and stop before anything happens. This happened in one patient who was found dead in his car after a coronary thrombosis. If a car is not allowed the patient may have to do more walking, and this may increase his attacks of anginal pain and be undesirable in that way.

B.—PROGNOSIS OF CARDIAC INFARCTION

Passing on to the prognosis, I want to give you some figures from a particular series of 70 patients, all seen at Guy's Hospital, because it makes a good uniform series, all with certain coronary thrombosis, with typical clinical histories and, in addition, characteristic and decisive electrocardiographic evidence. I should like to express my thanks to Dr. S. Suzman for help with following up this group of patients. Obviously this must exclude patients who died immediately, as they were not able to come up to hospital; it does not, therefore, cover the immediate prognosis. This is a point on which there is some difference of opinion, as to how many patients died in the first hours of their attack.

Few patients die immediately from the general effects of the infarct, but a certain number have the misfortune to get ventricular fibrillation as the result of the attack, and they, of course, die within a few minutes. In this sense cardiac infarction is one of the causes of sudden death, but often when we examine the heart of such a patient we find it easy to see the signs of coronary arterial disease, and that the vessels are nearly or practically occluded, though it is not easy to see that there has been a cardiac infarct because these changes take some time to develop and do not readily show up in the heart muscle at this early stage.

The only thing I would like to say on this point is that something like five-sixths of the patients survive the immediate period, and the risks of the first few hours. Even this number shows us that the onset of an attack is an extremely grave event. After the passage of the first few hours the prognosis improves every day. Even so, many more patients die in the first six weeks than in the next six months, so that the first six weeks is a rather critical period as regards early death, and this is another argument that can be used for the six weeks in bed.

Of these seventy patients I have managed to trace sixty-four, which is a high proportion, and the other six will not affect the figures very much, whatever their outcome. Thirty-four are dead,

and ten of these died in the first six weeks following the attack. After that a small number have died each year—rather less than 10 per cent. I would like you to remember that, even of those who have died already, the average duration of life after the attack was three and a half years. The details are shown in Table III. Thirty of the seventy are still alive, very nearly the same number as those who have died, and all these have been followed for at least two years and some for eleven years; the average period from their infarct up to the time I last saw them is six years. Roughly this means that out of a series of patients, excluding those who died too quickly to be brought into hospital, half of them have died and half of them are still alive. Of those who have died, the duration of life was over three years, and in the survivors six years. Many of the latter have been and are in good health and at work, and the a different matter from ten years added on to the life of some younger person.

TABLE IV.

AGE INCIDENCE OF CARDIAC INFARCTION

Up to 39	40 *to* 49	50 *to* 59	60 *to* 69	*Over* 70
3	19	41	30	7

One does see isolated cases of coronary thrombosis in relatively young people. I have seen one in a young man of eighteen, and a few others in people between twenty and thirty. I think the prognosis at the time of the attack is rather better

TABLE III.

DURATION OF LIFE AFTER CARDIAC INFARCTION

	In 34 patients who have died.	*In 30 patients known to be alive.*
Up to 6 weeks	10	0
6 weeks—1 year	3	0
1 year—2 years	6	0
2 years—3 years	4	5
3 „ —5 „	5	9
5 „ —8 „	4	8
8 „ —11 „	2	8
Average	3½ years*	6 years

* Excluding the 10 who died in the first six weeks.

average period of six years may well lengthen to something like ten years. And these are hospital patients who have not always been able to rest as much and take their work as easily as they should.

I am stressing these figures because people who have seen a patient so dangerously ill with coronary thrombosis may think the outlook so unsatisfactory that he is not likely to do much more, and that another thrombosis is likely to prove fatal within the next year or so. That is not a correct impression. Many of these patients have the expectation of living comfortable lives for five or ten years, and some even for longer. Moreover, as the following figures show, they are not young patients to begin with. The condition is very frequent at any age after forty, and the greatest number of cases occur between fifty and sixty, so that five or ten years added at that time of life is in the younger patients, and if they once recover the outlook is relatively good. This is probably because the infarct is more likely to be due to thrombosis from some infection in a relatively normal coronary artery than to obstruction of an artery by progressive atheroma.

In assessing whether an individual patient has as good an outlook as these figures of mine suggest, the severity of the infarct originally, and whether the condition of shock following the thrombosis lasted for several days, are very important. This last always represents a large infarct and, other things being equal, it means that the outlook is relatively bad. Many patients are wanting to get out of bed after the first two or three days, as they feel fairly well, and generally such cases on the whole represent smaller areas of infarction, so that, other things being equal, the outlook is relatively favourable.

To be Concluded.

O.T.C. Camp, 1939

IN order to provide camp equipment for the immediate training of the newly-formed Militia and second-line Territorial units, the War Office found it necessary to cancel this year's Officers' Training Corps camps. That much is common knowledge. The extent to which individual O.T.C. contingents undertook their own arrangements is less widely known. The effect of the War Office decision was, from the military point of view, probably less of a disadvantage to men who already held Certificate A or Certificate B than to the recruits expecting to receive their training for the practical parts of these examinations. The University of London O.T.C. was able to overcome this difficulty by the use of its own standing camp at Princes Risborough, where a limited number of Officer-Cadets from each constituent arm were given eight days' training.

On July 16th, the Medical Unit sent about one hundred and sixty of its members into camp. These were candidates for Certificate A (Medical), but the majority already held Certificate A (Infantry), obtained in the Junior Division at school. The Unit was accompanied by seven officers, ten senior officer-cadet instructors and two regular R.A.M.C. sergeant instructors. The establishment of the Medical Unit is eight companies, seven of which are distributed one to each of the larger hospitals while the eighth is shared by the five smaller hospitals. This organisation was maintained in camp only for the location of company lines and for the inter-company competition in connection with efficiency displayed at morning kit inspection. Guy's not only tied for second place in this, but also provided the largest company in camp, a feat which was in no small measure the culmination of Captain J. H. Mayer's efforts on behalf of No. 3 Company during his period of command over nearly the last two years.

Recently, Captain Mayer has been appointed Surgical Specialist to a Territorial General Hospital. It must be recorded here that while the Company regrets deeply the loss of its Officer Commanding and is highly appreciative of his unsparing work in its interests, Captain Mayer leaves with the congratulations and good wishes of all members.

For purposes of training in camp the Medical Unit was divided into squads each under an officer-cadet instructor, the whole scheme being supervised by the officers and permanent staff instructors. Days were divided into periods. Lectures and demonstrations in map-reading, first-aid and anti-gas training occupied much of the time, the remainder being spent in practical instruction in squad drill and stretcher exercises with collection and evacuation of casualties in the field.

It is impossible to emphasize too strongly that the principle of O.T.C. training is the teaching of officer-cadets to train men. With this object in view the candidates were given every opportunity themselves to instruct the squads and to gain that facility and confidence in command so essential to the successful officer.

On arrival in camp the Unit was greeted by the Contingent Commander, Colonel S. J. Worsley, D.S.O., M.C., who emphasized the imminent possibility of war and explained the necessity for covering in one week a syllabus of work to which, in other years, a fortnight had been devoted. The response was not disappointing, for from nine in the morning to six at night the keenness displayed was such that would make many of the former and senior members of the Corps rub their eyes in astonishment. At the Practical Examination for Certificate A held at the end of the week two failures only were recorded. In itself that is not surprising, but the outstanding feature was the peculiarly high standard obtained by all. The morning of July 21st was given over to a Field Exercise. An appreciation of the imaginary disposition of the defending troops had been circulated to all ranks, while the medical establishments accompanying these formations were provided by a number of selected officer-cadets. Two most realistic regimental aid posts in well-chosen sites were inspected by the remainder of the Unit, which marched over the operation area. Frequent halts were made to allow officers to give a critical survey of a scheme which proved to be highly instructive.

Work did not occupy quite all the week, and the evenings, which were, of course, free, were often celebrated with traditional vigour. Though the weather was hardly that of choice and flooded tents were not unknown, the bright intervals were sufficient to prevent any noticeable dampening of spirits, and there was considerable disappointment on the last day, Sunday, July 23rd. At 5.45 p.m. Lt.-Col. G. P. Crowden took the salute as the Medical Unit left camp on its march to the station.

Next term the Company will have vacancies for recruits, and it is hoped that these will be filled by suitable applicants, though at the present time there is still a waiting list.

There are individuals who deride the O.T.C., who cannot speak of it without an accompanying breath of cynicism. If war comes it seems clear

that younger members of the medical profession will be required to serve with the Armed Forces. Many will be employed as medical or surgical specialists, but more will find themselves Regimental Medical Officers or in Field Ambulance formations. These last, no matter how glittering their academic qualifications, will, if they have had no previous O.T.C. experience, need some months' training in military duties. To that extent the utilisation of their full services will be delayed. It is often said that in modern war time will be an important factor. Let the critics remember that.

R. T. H.

Gland Therapy

By Sir Harley Wimpole, M.A. (Anderman), D.Sc. (Perim), M.D. (Tristan d'Acunha), L.L.D. (Spitzbergen), D.C.L. (Erewhon).

MUCH water—I hope—has gurgled down the waste-pipes of the College baths since a distinguished teacher at Guy's alleged, in effect, that the sale of polyglandular preparations is a subtle scheme to dispose of the offal of the Chicago slaughter-yards at fabulous prices.

There is nobody living now who will be able to recall my statement—made long before Brown-Séquard laid the foundation of modern endocrinology by his work on the thyroid—that " if it could be possible to administer glandular extracts and vitamins in assimilable form to those, young and old, who feel their powers declining through illness, overwork or worry, it would be possible to give a new lease of youth, a new lease of life, and a new lease of happiness."

In those dark days we were groping blindly in our endeavours to assay the hormone content of the blood, so that we might be able to determine in what respects it was deficient and, by administering the correct amount of the necessary hormone, to restore the ailing individual to a pristine state of perennial youth.

In those days we did not know—we did not even care—that so far as his hormones are concerned, every individual is a law unto himself; that their relative proportions even vary with the mood of the moment, be it submissive, aggressive, terrified or amorous. How *could* we know that all these were but normal physiological responses to uncountable and unknown stimuli, of the very existence of which we did not even dream?

With that Fearlessness which is always the hand-maiden of Ignorance, little did we think that we were meddling with The Most Dynamic Force In The Human Organism. The force that gave the world its Venus and Adonis, its Abelard and Héloise, its Irish Giant—and the lack of which gave us Tom Thumb. It was this mysterious force which impelled Hannibal, Julius Cæsar and Alexander the Great. It was the driving power of Napoleon and Nelson. It was responsible alike for the prowess and the remorse of King Solomon, and instilled into his mind, by bitter experience, the wisdom for which he remains famous unto this day.

In the flush of our success we are apt to forget the bones about the wayside, those grim milestones that mark the road to achievement—mute monuments to the march of science.

There was the case of John Bowcock, a frail old gentleman of 97, who was the very first case upon whom Professor J. T. Strong made a clinical trial of his Peroral Polyglandular Pelloids. Through an unfortunate mistake on the part of the laboratory boy when entrusted with the preparation of the pelloids, ten times the maximal dose was given. It has always been to me a matter of deep regret that I did not become associated with Professor Strong until John Bowcock was put upon " Calf and Stile " in a feeding bottle, although I was fortunate enough subsequently to have an opportunity to watch the desegmentation and defertilisation of the ovum upon the warm stage of the microscope.

Then there was the case of the man whose name escapes me for the moment. He was a Civil Servant who had suffered for many years from overpowering lassitude, which was thought to be due to endocrine deficiency.

Through an entirely unforeseen error made when calculating the experimental formula, a lethal dose was given. This regrettable mistake was the cause of great trouble and inconvenience to the mortician, no fewer than thirteen of whom were required to control the cadaver while the lid was being secured on the casket.

In the days when I was a physiologist, the whole subject of endocrinology was in its infancy. The methods of investigation of the ductless glands were crude, but the best at our disposal, namely: (*a*) extirpation experiments; (*b*) the administration of glandular extracts; (*c*) feeding experiments with gland substance, and (*d*) observation of the effects of disease of the glands and correlation of the symptoms and post-mortem findings. We satisfied ourselves that the thyroid was the only

ductless gland which could be given either by the mouth or by injection and produce its specific effect on growth and metabolism. The others were effective when given by injection, but by the mouth had no effect whatever, either specifically or on metabolism generally.

All this has been changed. *To-day, that medical dream has become a reality.* The tireless research of the endocrinologist has enabled him to devise a standardised preparation containing all the hormones in optimum proportions. It can be given by the mouth to any and every case without any one hormone producing a preponderating effect. If you suffer from hypopiesia, a course of this preparation will make you a new man and raise your blood pressure to normal. If you are the subject of pancreatic glycosuria, no matter how high your blood pressure, there is no need to diet or to take insulin. A few doses of this hormone preparation will put you right. Those who find shortness of stature a handicap in business can increase it at the rate of one foot per month up to seven feet, thanks to the activity of the pituitary fraction of the compound. Given in suitable doses the giant may retrogress both in height and age, even to the Graafian follicle if desired. Bald men may grow hair. The sexes may be transmuted—although this is an expensive process, entailing reduction to the segmented ovum and re-growth.

Physical and mental debility, nervous breakdown, anæmia of all varieties, lassitude, premature ageing, stomach troubles, insomnia and nerves are, of course, everyday ailments that are always with us; but they are child's play to a remedy with capabilities such as I describe.

"How are these miracles effected?" you may ask. The answer is quite simple. By combining a "vitamin catalyst" with the polyglandular extracts, which then become effective when given by mouth. It is solely in the interests of science that I make known the fact that the Giant Panda which has created such interest at the Zoo was once my pet white mouse Fifi, which accidentally consumed some polyglandular mélange in process of manufacture during my early experiments.

I regret that I am not at liberty to divulge information about the "vitamin catalyst" and its action. It is the intention of Professor J. T. Strong to exploit his preparation commercially, and he is in treaty with the Itterische Actiengesellschaft with a view to disposing of the Continental rights. Whether any government could permit the negotiations to be completed seems doubtful, in view of its possible use for military purposes.

Review and Hospital Information, etc.

Nursing in Time of War. By P. H. MITCHENER, C.B.E., M.D., M.S., and E. E. P. MACMANUS, O.B.E., S.R.N., S.C.M. Published by Messrs. J. & A. Churchill, Ltd., London. *Price* 1*s.* 6*d.*

THIS little book is of pocket size and should be in the possession of everyone who has to deal with air-raid casualties. It is clearly written and contains all the information necessary for the nursing profession or first aid parties.

The opening chapters deal with the general A.R.P. organisation; the equipment and running of first aid posts and casualty hospitals; and nursing under improvised conditions in huts, tents or civilian buildings. There follow chapters on burns and gas, wounds, shock and infection, fractures, medical casualties and the techniques of transfusion, infusion and anæsthesia. These chapters are mines of information invaluable to all concerned in the treatment of casualties. Several useful appendices appear at the end of the book.

The authors are to be congratulated on the production of so valuable a manual. The views expressed are thoroughly sound and interest is maintained throughout. Great popularity should be achieved by this little book and a wide sale among nurses, students and lay helpers seems assured.

S. H. W.

Pass List

UNIVERSITY OF LONDON.
SECOND EXAMINATION FOR MEDICAL DEGREES.
PART I.
July, 1939.
L. H. G. Handley.

Papers by Guy's Men

Bradlaw, Robert. The histology and histopathology of the dental innervation. *Proc. Roy. Soc. Med.*, 1939, xxxii, 1040 (Sect. Odontol.).

Forman, Louis. Kaposi's idiopathic multiple pigment sarcoma. *Ibid.*, 1023 (Sect. Derm.).

—— Lichen spinulosus and lichen planus. *Ibid.*, 1031.

Dowling, G. B. Lichen amyloidosus. *Ibid.*, 1029.

Mann, H. Corry. School age diet. *J. Clin. Res.*, 1939, xxv, 85.

Ryle, John A. The timing of symptoms. *Clin. J.*, 1939, lxviii, 305.

Lambrinudi, C. Injuries to both semilunar cartilages of the knee joint. *Ibid.*, 316.

Smith, Ronald E. Mumps. *Ibid.*, 328.

Worth, H. M. Radiological findings in some less common jaw affections. *Dental Rec.*, 1939, lix, 439.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

A FORTNIGHT of war has passed, with little change at Guy's except to give us an opportunity to take stock of our new position and to repair some of the deficiencies of the system of which we are now a part. The absence of air-raids up to date must be a source of embarrassment to those responsible for the Air-raid Casualty organisation, as it certainly is for those whose business it is to prevent evacuated mothers and children from leaking back to London.

There are now about seventy patients in the wards of the Hospital—medical and surgical emergencies taken in since the evacuation. These can be discharged to their homes when they are well enough to go, but they can only be evacuated to the base when their number is sufficiently large to justify an evacuation *en masse* by charabanc. The total number of these "civilian sick," which, apart from air-raid casualties, Guy's is to maintain throughout the war, is 135. The hard cases that might have arisen as a result of too strict an interpretation of the word "emergency"—cases for investigation and possibly operable carcinomata, are taken into the wards in addition to the obviously acute cases. There they are dealt with normally as far as possible, with the proviso that the usefulness of what is done here must obviously depend on the likelihood of their being evacuated to the bases within a given time. The only disadvantage of this scheme would seem to be the possibility of a local air-raid while they are in Guy's. The risk of this has to be weighed against the risk to the patient should his condition go untreated, and the opportunities he may have of getting adequate treatment elsewhere.

Meanwhile the Front Surgery, which to begin with bore almost all the weight of Out-patients and Back Surgery as well as its ordinary work, has returned to normality, and a quiet normality at that. Out-patient clinics are now held at the following times: Medical and Surgical, daily, 9.30 a.m.; Eyes, Tuesday, 1.30 p.m.; E.N.T., Monday, 10.30 a.m.; Skins, Thursday, 1.30 p.m.; Orthopædics, Friday, 1.30 p.m.

Almost all patients are referred back to their own doctors, with history, diagnosis and suggested treatment. A limited number of investigations can still be done, and they are being further organised. In a short time it should be possible for patients to be sent up for investigation as usual, but it is hoped that only patients from the surrounding district of the Hospital will be so sent. On the whole, the patients take it remarkably well; even the hardy annuals from "The Trap" make a brave show of setting off to find a doctor of their own. A minority regard it as a malicious plot

"Half-Dug"

aimed by Fate (represented by the O.P.O.) at their discomfiture.

Miss Addiscott is fortunately still at Guy's, and the Almoner's Department is keeping in touch with such convalescent homes as are still admitting patients. There are a few of these left, mainly the ones for children.

▭

As for education, the full schemes of the Medical and Dental Schools are not yet available. The students in the Clinical Period are already at Guy's and the various base hospitals, where rounds and lectures have been organised, but the fate of the Pre-Clinical students is as yet unsettled. It is possible that the Medical School will move bodily to Tunbridge Wells and Pembury.

The Dental School is organising courses *at Guy's* for students taking the Final L.D.S. and the Examinations in Mechanics and Metallurgy in October. No other teaching has been arranged so far.

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On the social side, we at Guy's have no need to envy our friends at the other hospitals, though a visit to Dartford last Saturday convinced us that the staff there was the best off of the Guy's men in *partibus hereticis*. The comforts of Nuffield House are still ours, with the addition of a bar in one of the ground-floor blocks of cubicles. In the early days we spent happy hours on the roof, reading, sun-bathing and admiring those charming and paradoxically peaceful-looking barrage balloons which float all around us. In the evenings many of us renewed with the heavenly constellations an acquaintance that had been dormant since childhood. The weather is now too cold for these exercises, but by the efforts of our accomplished radiologist, Dr. T. H. Hills, an almost nightly entertainment is given in the physiology Theatre. Variety by professionals and by amateurs recruited within the Hospital, and old silent films such as Chaplin shorts have mitigated the depressing effect of the black-out, nor do they last so long as to imperil an evening visit to "The George," where the darts boards are kept busy. A dance was held at the Nurses' Home last week, where all warmly enjoyed themselves.

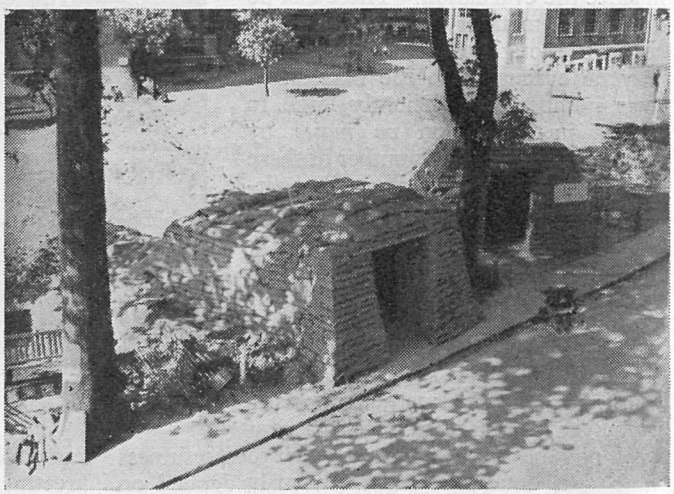
Guy's has contributed to the rush of marriages which war has precipitated all over the country. No fewer than five present or recent House Officers, one of them the Assistant Editor of this journal, have taken the plunge since the crisis started, and one may perhaps assume that even more have become engaged, if the usual relation between dead and wounded in war casualties holds good. We offer our felicitations to all these fortunate people, whose act of faith at the present time shines like a good deed in a naughty world, but especially to Sister Thomas—known to countless dressers as Sister Surgery—whose marriage is announced on another page.

▭

No news, up to the time of printing, has been received from Pembury or Orpington, but letters from the other hospitals appear on a later page of this issue. We are also able to publish a list of Guy's staff serving in the sector. We hope in a fortnight's time to give news from every hospital in the sector.

▭

At one of the base hospitals, a wing is still occupied by mental patients, and nearby are the quarters of four House Officers from Guy's. During the first air-raid alarm two old loonies were looking down on the animated scene, doctors and nurses running about looking for gas-masks and the air vibrating with the sirens. "What's all this fuss about?" said one. "I don't know," said the other. "I think they must all be mad."



"Finished"

And did you hear about the nurse who was asked by someone if there was an auriscope in the ward? She said she would get one, and asked a colleague where a horoscope was to be found. To which the answer was, "In the *Daily Mirror*."

Angina Pectoris and Coronary Thrombosis

II.—TREATMENT AND PROGNOSIS

A Lecture delivered at Guy's Hospital on December 2nd, 1938, by Maurice Campbell, O.B.E., M.D., F.R.C.P.

C.—PROGNOSIS AND TREATMENT OF ANGINA

I propose to spend the rest of our time on the prognosis and treatment of angina. I shall have less to say about prognosis, partly because there is a less definite moment from which to make a start and partly because I have made less effort to see a large group regularly over a long period. As angina is produced by an earlier stage of the same pathological conditions that may lead to a coronary thrombosis, the prognosis may be expected to be better than after an actual thrombosis, so that here again the patient may look forward to a period of many years of fairly comfortable existence. A large number of such patients, whom I have seen, are leading active and enjoyable lives ten years after their first attack of angina, though usually they have some greater or lesser limitation of their activity.

The consideration of this question is to some extent mixed up with treatment, and there are various types that I want to differentiate, in which the prognosis is not the same. In particular, angina of recent onset or angina that is getting progressively worse must be treated more as potential cases of coronary thrombosis.

Limitation of Activity

Suppose that one is seeing a patient with angina for the first time, there is no need for the same period of rest in bed as after a coronary thrombosis. The first object should be to find out what sort of life the patient can lead without anginal pain, and therefore how much limitation he needs. The only things that would lead us to put such a patient to bed at once is if he is steadily becoming more and more limited in what he can do, *i.e.*, if one fears that there is *progressive* narrowing of a coronary artery; or if he has already reached the stage where such slight activity as walking across the room provokes anginal pain. In the latter case it may be impossible to reduce his activity further without putting him to bed, and a period of treatment in bed may result in great improvement.

The first thing to be thought of is such a reduction in the patient's activity as will lead to a very great diminution in the number of his attacks. I am putting it in this way for the complete avoidance of attacks is probably aiming too high. This first stage may necessitate the patient stopping work or it may not.

One patient may get anginal pain only in special circumstances when he worries, and it may be enough to give him some advice about avoiding special conditions which bring it on. Worry is often a very important factor, and this may be minimised by reducing the activity no more than is really essential. The first consideration must be to cut down the activity enough to reduce the likelihood of attacks while not unduly crippling the patient.

Sedatives and Nitrites

Just as with coronary thrombosis rest and morphia were put first as the essentials of treatment, so with angina one should think of limitation of effort and relief of pain. The most important medicinal preparations for angina can all be included in the group of sedatives or nitrites. In some ways sedatives are the most important element of treatment, and very often this is not sufficiently stressed. It is clear that the degree of atheroma of the coronary arteries is of the same extent all the time, but the patients only get attacks occasionally, that is when there has been some unusual call on the heart for work, or when some reflex cause has changed the conditions in the heart. With adequate doses of sedatives his reflex activity may be reduced so that the number of attacks of angina is diminished very considerably. That will apply particularly to over-anxious patients.

I should like to stress one point in prognosis here, namely, that this is not necessarily worse in the over-anxious patient, as one might be inclined to think; because very often with this type of patient the amount of coronary disease is less than half of the cause, and the reflex factors account for more than half. On the other hand, with the quiet, phlegmatic patient, who thinks little of the pain, the actual arterial disease may represent 90 per cent. of the cause of the attacks, and the reflex factors only the small remainder.

Very often the less the patient thinks of his angina the more you, the physician, ought to think of it, and one of your tasks will be to persuade him to take it more seriously.

Nitrites.—The next thing in treatment, also included under the relief of pain, is the question

of nitrites. I see a great many patients who are not having these given adequately—in two ways. Firstly, a little nitrite may be added to the mixture given to the patient. The effect of this on the blood pressure is to reduce it for about ten minutes in the course of the day, and what likelihood is there that that ten minutes will ever coincide with the period of anginal pain?

The second thing is that so many patients seem to have the idea that nitrites are to be taken when the pain is so severe that they cannot stand it any more, and that idea is so prevalent that I think doctors must be responsible for it. This may be true as a generalisation in the use of all drugs that diminish sensibility, but is not true of nitrites in angina, because with these we produce vaso-dilatation and generally lowered blood pressure and so relieve the cause of the pain.

Tablettæ trinitrini, 1/100th grain, or sometimes even 1/200th grain, is in my opinion the best form to use. It should be *chewed up* and then placed under the tongue so that it is absorbed as quickly as possible. In some patients sniffing a capsule of amyl nitrite is even more effective and may be used if tablettæ trinitrini fails, but it is nearly always more disagreeable in its effects and sometimes the flushing and palpitation produced prevent it being used freely.

The patient should be encouraged therefore to use nitrites. He may ask whether he will do himself any harm by their too frequent use, and my reply is that the first sign of too much is a headache, and that most people can take six or seven tablets daily without producing this. Thus there is an automatic check as to how much is advisable for them. Within those limits they should be encouraged to avoid as far as possible their attacks of pain by the use of nitrites.

The Slow Start

Before I pass on to diet, which is extremely important in this connection, there is one other thing which comes under the general term of avoidance of pain. Many people find that it is at the beginning of exercise that they get the pain, and that if they can learn to go slowly at the start they can often avoid it and later on can go more quickly

I have just had a patient in Nuffield House with coronary thrombosis. He has had anginal pain for about two years. In walking the two hundred yards from his house to the railway station he would have to stop once or twice with anginal pain, but after that he was capable of walking twenty miles a day on the downs, and even towards the latter part of his walk—although he is nearly sixty years of age—he was doing four miles an hour.

So great a difference is exceptional, but one often finds that after a patient has warmed up to the work—the phenomenon known as the "second wind"—his anginal pain ceases, and if he will take advice about beginning his exercise slowly he can often do much more. Sometimes even the routine taking of nitrites as he leaves the house at the beginning of his walk will get him through this early period without pain. I have one patient, now drawing a pension that he very nearly missed, because he thought he would be unable to do his last year of work. To get to work he had to use one of the few Tube stations where there was no escalator. By taking nitrites just as he left the train before he had to mount the stairs he was able to manage this last year. That is just an instance which may help you to remember this principle, which can be applied to the diverse lives of your patients.

Diet and Other Factors

Diet.—The last thing is the digestive side. Most patients with angina will try to persuade you that they have indigestion and that their hearts are quite good. I saw a man this morning who had his first attack of angina in 1934 and a coronary thrombosis in 1936, but still tried to think that it was no more than indigestion. That just emphasizes the relation between this condition and the digestion, and how easily pain is provoked after meals. If the importance of this is stressed, and the patient is advised never to undertake any exertion quickly after his meals, many of these attacks will be prevented.

Breakfast seems more important than other meals, probably because it is the meal after which people are most hurried. I am sure you will stop some patients from having anginal pain if you persuade them to get up earlier and start their after-breakfast activity in a more leisurely way. One gets this same story time after time, and again the story of the man who cannot play the first two holes at golf because he has had too good a lunch, but when the effect of this has worn off he can get into his stride. The avoidance of a meal before play may be quite enough to allow them to play in comfort.

From this point of view, therefore, diet becomes most important. Small meals and an adequate rest after them are the things to rely on, and then you can often help them greatly.

Anæmia and Obesity.—Even by spreading this subject over two lectures I have not left myself time to deal with it adequately, and some other things must be referred to shortly.

Anæmia will provoke anginal pain in a heart not really bad enough to provoke angina when there is no anæmia. The importance of this

has already been stressed, and the possibility of anæmia should always be remembered.

If the patient has to move about sixteen stone each time he walks this, too, may be enough to provoke anginal pain, whereas if he were only twelve stone he would not suffer it. Reduction in weight will often cure anginal pain for many years, and reduction in blood pressure may act in the same way.

Syphilitic Aortitis.—The great majority of cases are due to atheroma and only a few to syphilitic aortitis. If, however, you get an early case of angina due to syphilitic aortitis it may be completely cured by vigorous anti-syphilitic treatment, the vigorous use of arsenic and mercury first, and the prolonged use of potassium iodide afterwards. Although probably only one in twenty or thirty cases are due to syphilis, these do form a very important group to remember.

Association with Valvular Disease.—This is rarely associated with angina except some cases of syphilitic aortic regurgitation and some of aortic stenosis of any ætiology. These may sometimes come early in life and have a good prognosis, because it is a stationary condition with little liability to progress. I have one girl in mind particularly who has quite a high grade of aortic stenosis, but the amount she can do without getting anginal pain has remained constant for the last fifteen years. On the other hand, cases associated with aortic incompetence—and the association of this with angina generally means syphilis—and elderly cases with atheromatous aortic stenosis have a very much more graver outlook.

I had hoped to have time to discuss the more grave operative treatment in those cases where these simple methods are not sufficient. Although complete thyroidectomy has proved disappointing in many cases, I think it is still the best operative treatment to consider.

The Guy's Student in 1811

(This is the indenture of apprenticeship of John Sims, whose diary was published in a recent issue of the GAZETTE. *There follows his first application for a house-appointment when his apprenticeship was over.*—EDITOR.)

THIS INDENTURE witnesseth that JOHN SIMS by and with the consent of his father OLLIVE SIMS of STOCKPORT in the County of CHESTER Chemist and Druggist hereby made a party in these presents doth put himself apprentice unto JOHN ATKINSON RANSOME of MANCHESTER in the County of LANCASTER Surgeon, Apothecary and Manmidwife, to learn his art and with him after the manner of an apprentice to serve from the seventeenth day of the sixth month one thousand eight hundred and nine to the twenty-seventh day of the fifth month one thousand eight hundred and thirteen when he attains the age of twenty-one years (that is to say until the full end and term of about four years), from thence next ensuing to be fully complete and ended. During which time the said apprentice his Master faithfully shall or will serve, his secrets keep, his lawful commands everywhere gladly do, he shall do no damage to his said Master, nor see it done of others, but to his powers shall let or forthwith give notice of the same to his said Master. The goods of his said Master he shall not waste, nor the same without license of him to any give or lend. He shall neither Buy nor Sell without the license of this said Master. Taverns, Inns or Ale Houses he shall not haunt. At Cards, Dice, Tables, or any other unlawful Game he shall not play. He shall not contract Matrimony within the said term nor absent himself from his said Master's service day nor night unlawfully. He shall not associate with unsuitable companions, or any contrary to the approbation of his said Master. He shall not read nor have in his possession Novels, Romances, Plays, or any improper Books that tend to hurt and corrupt the mind. In his dress and address he shall appear and act consistent with his station and the principles of the religious society of Friends of which he is a member. And in all things as an honest and faithful apprentice shall and will behave himself towards his said Master and all his during the said term. And the said JOHN SIMS the son and OLLIVE SIMS the father do hereby jointly and severally covenant and agree that the said JOHN SIMS at the expiration of the said term shall sign an agreement to the following effect: That the said JOHN SIMS shall not nor will not set up or practise the said arts of Surgery, Pharmacy or Midwifery in the town of MANCHESTER or within the distance of five miles thereof under the penalty of five hundred pounds without the consent and approbation of the said JOHN ATKINSON RANSOME. And the said JOHN ATKINSON RANSOME for and in consideration of the sum of eighty pounds now paid, the receipt whereof is hereby acknowledged, his said apprentice in the

arts of Surgery, Pharmacy and Midwifery which he now useth, by the best means he can shall teach and instruct or cause to be taught and instructed, finding unto his said apprentice sufficient Meat, Drink and Lodging during the said term. And for the true performance of all and every the said covenants and agreements either of the said parties bindeth himself to the other by these presents, in witness whereof the parties above-named to this Indenture have set their hands and seals the seventeenth day of the sixth month in the forty-ninth year of the reign of George the Third of the United Kingdom of Great Britain and Ireland, King, and in the year of our Lord one thousand eight hundred and nine.

Sealed and delivered being first duly stamped in the presence of
(*Sd.*) THOMAS STORRS.

(*Sd.*) JOHN SIMS. (*Seal*)
(*Sd.*) JOHN ATKINSON RANSOME (*Seal*)
(*Sd*) OLLIVE SIMS. (*Seal*)

Advertisement in *Wheeler's Manchester Chronicle*, July 24th, 1813 :—

" *To the* TRUSTEES OF THE MANCHESTER INFIRMARY.

" The Office of HOUSE-SURGEON to the Infirmary being vacant, I take the liberty of offering myself as a Candidate.

" Having served an apprenticeship to J. A. Ransome, one of your Surgeons, and attended the surgical practice of the institution four years, and also attended Anatomical and Surgical Lectures in London, I trust that my qualifications will be found such as to entitle me to your preference on the day of Election.

" JOHN SIMS.

" Manchester, 20th of 7th mo., 1813."

News from the Base

Farnborough Letter

Your correspondent at Farnborough feels he can begin his first despatch in no better way than by recording with sober accuracy the names of those of the Staff and House Officers who now find themselves in charge of Guy's tradition and reputation at this outpost of Sector X.

The Staff, led by Mr. Davies-Colley, comprise Messrs. Grant Massie, Brock, Gibberd, Stamm, Cann and Harris. The physicians are Dr. Mutch, Dr. Forman, Dr. Felix Brown ; and the radiologist, Dr. Lindsay Locke.

Also shining in our midst are the pathologists and satellites. Professor Payling Wright has been seen moving sedately to and fro, while Dr. Navasquez we have always with us.

Truly, then, are we blessed with Guy's eminence. The modest attachés to this General Staff are Messrs. Gilford, Hinde, Stott, Price, Stafford-Clark, Cole, McClean and Leeming. There are also five permanent M.O.'s here who are co-operating in the new scheme.

The strength of the Guy's Expeditionary Force is further increased by some thirty students and no less than ninety nurses, all of whom gladden our eyes and lighten our burdens. Their presence has saved more than one resident from loneliness, to say nothing of holes in his socks.

Of our work we can report little. We have but about five patients per firm ; the sick and injured are in fact hopelessly outnumbered by the medical personnel. But we have an imposing and complicated rota, with three main surgical teams each comprising a general surgeon and a surgeon from a special department, their attendant house surgeons, and dressers. Also there flourish three medical firms.

Teaching is being carried on with enthusiasm. As well as our own teachers, we have a neurological surgeon, Mr. Knight, from the West London Hospital. His first lecture on Brain Surgery in Wartime was attended by more than one qualified man, with considerable advantage. We are now more than ever anxious to be provided with steel helmets.

This matter of protection differs vastly here from Guy's. Perhaps we are in less need of it ; none the less we would appreciate the provision of some humble cavern to hide those of us not on duty from the wayward bomb. We have no shelters, no duty gas masks, and, as we hinted before, no tin hats.

However, we bristle with morale. There is a warning siren not a quarter of a mile from us. No sooner does it warble in its inimitable way than we trot briskly to our posts. At night, so black is our black-out within as well as without, that our determined efforts to reach our posts would put those Keystone Cops of the early Chaplin Comedies to shame. The expectant air is heavy with our tumult ; sickening thuds tell of bodies falling upstairs, falling downstairs, falling over each other. But the " All Clear " finds each of us, panting, at his post.

Meanwhile we try to maintain Guy's tradition. Our night rounds are now permitted, although

still not encouraged. At first they were the subject of considerable trauma. Farnborough nurses were told that Guy's men had no business in the wards at night; it was nonsense for them to write up drugs, because none of them were qualified, as could be seen from their designation of " Mr."

It was perhaps the same process of thought, coupled with a similar zeal for puritanical morality, that led to another point of dissension. One of our most venerable and respected Sisters was told she " had been seen talking to a student." It transpired that the student was, in fact, Mr. Gibberd. Friction, however, is swiftly declining.

We, for our part, realise the difficulties of sudden transition of a County Hospital to a large Casualty Hospital. In the hope of later improvement we endure the lack of a Common Room or sitting-rooms, and the rather indifferent food which all too often is inadequate.

We are grateful for the use of two excellent tennis courts and the proximity of the local tavern. But to pretend that we do not miss the atmosphere of the Park, or the homely air of the Ship or the George would be idle indeed.

Ours, then, is the lot of the traveller in a strange land. We have to make two blades of grass grow where only one grew before. When we arrived, there were but four dozen pairs of Spencer Wells in the entire hospital. We straightway asked the Government for some more, and it almost seems as though they have arrived; for Dr. McClean removed an appendix this afternoon and he seemed to have enough.

To all the rest of Guy's, scattered over Sector X but not sundered in interest or outlook, we send our greetings. And in a fortnight's time we hope to give you further news of our rural scene.

D. S. C.

The County Hospital,
Farnborough, Kent.

Dartford Letter

No doubt this news from the Kentish Front will read more like the chronicles of a country house-party than a diary of a war-time hospital.

Gradually, over the first week of war, the medical staff filtered in, as individual interpretations of " a state of emergency " were realised.

The stupendous nature of the task which befell the Administrative Staff here can be appreciated from the fact that this place, from an empty fever hospital, seldom called upon to house more than a few hundred patients, had to be brought up to a full-strength casualty clearing station of 3,000 beds. Rapidly this is being achieved. Since it is built on a horizontal plan and extending over 350 acres, the possession of a bicycle is almost a *sine qua non* for M.O.'s in view of the threatened curtailment of petrol supplies.

During the first ten days, filling and piling sandbags kept the medical staff and nurses both hot and healthy. The admirable practice of adequate fluid replacement causes no little agony at the breakfast table now that the fluid loss is no longer so free. The hospital, however, lacks nothing in the way of sports facilities. Golf, tennis and cricket can and have all been played in the grounds. On Saturday last the Medical Staff played the Farm and Works Staff of the Hospital, winning in spite of adverse conditions. Although many had not handled a cricket bat for several years, a fair sprinkling of talent sufficed to provide entertainment for the " gate."

The news from Guy's of mass entertainment—concerts, dances and films, leaves us green with envy. Nevertheless among our 1,300 nurses there has been some talk of a dance.

The leading attraction so far has been the " Long Reach "—an inn situated on the river bank which forms the north boundary to the hospital grounds. Here feelings can be soothed nightly by hard drinks and soft music.

Lest it be thought that life here is one of unbroken idleness, it must be added that daily lectures on War Surgery, Organisation, Gas Casualties, etc., are given by the Consultant Staff for Nurses, Dressers and Housemen.

So far the " horrors of war " have passed us by, save for the prospect of petrol rationing shortly. Qualms as to food shortage are difficult to appreciate when the spoils of the Hospital Shoot appear frequently on the mess table.

With one of our number running the Mess bar in a manner which would do credit to a professional we have no liquid worries either, at least not as regards supply.

Thus, Sir, you appreciate the difficulty we have in providing you with news without repeating ourselves. Soon, no doubt, we shall admit a patient to keep us busy. Rumour has it that civilian sick may come to us in lieu of the air raid casualties for which we are prepared.

So far our lives have not been rent by dissension or discomfort, and we hope when next you hear from us our peace will still not have been shattered by aerial bombardment.

J. S. C.

Joyce Green and Orchard Hospitals,
Dartford, Kent.

Evacuees

MY consulting-room door opened timidly and a nervous little woman planted herself in the vacant chair opposite my desk.

With a perfunctory " Good-morning " I continued my irksome job of filling up my last patient's medical record, as much to allow her time to regain her breath as to recover her composure.

" I would like to know if you think I am pregnant, doctor. I've been scared-like to come and see you." . . . The wedding-ring was there, so it could not be that, I thought. " Too many, perhaps, or none at all."

A different stimulus provokes the same response in this as well as in other human reactions.

No need for any distinguished obstetrician to decide this matter. The verdict was as clear as day.

" What must I do now ? "—rather tremulously.

" Just wait for a beautiful baby to arrive," I replied.

Then, with a quick, half-frightened look : " Do you think it will have crooked feet ? " she said.

My look of surprise wandered from her face to her feet.

" Until I was twelve my feet were like this " (and she turned her toes completely inwards) " but a wonderful man called Trethowan put them right. He is dead now, poor man," she added.

My mind at once flitted back over a chasm of fifteen years and more to a vision of " Old Treth " walking with that rapid and unmistakeable gait from Out-Patients down towards the Colonnade, and to that quick staccato response as someone greeted him *en route*.

And now, as I looked at that neat linear scar over the external malleolus, I thought how many other walking miracles there must be thanks to " Old Treth."

I looked through the surgery window as she mounted her bicycle and rode rapidly away, and I thought :—

" Oh, for the touch of a vanished hand
And the sound of a voice that is still."

* * *

The short, stout, little woman with the plump-looking urchin in one hand and another longer, but thinner, version in the other, sat down hastily.

" Ah ! " I thought, " Sparrick's Row or Newcomen Street "—much as one might say " Eton and Oxford " in another connection.

" The lady at my billet does not like it because my little boy has recently had whooping-cough, but the Waterloo 'Orspital said he was cured six weeks ago. Just before we came down here he was being treated at Guy's 'Orspital for a gentle heart." The lift of my eyebrows must have been visible almost at London Bridge.

" H'm," I thought, " evidently a new clinical entity, first described at Guy's Hospital," and I felt my bosom swell with pride at the thought that Guy's was once again in the van of progress. Seized with that " cacoethes," that " itch " for knowledge possessed by myself and the ancient Greeks in common, I grabbed my stethoscope, determined to search the præcordium millimetre by millimetre, if necessary.

A roaring rushing sound as of many waters smote upon my ears, and I felt that a look of bitter disappointment must have crept over my face. " Guy's have discovered nothing very novel just lately," I reflected moodily.

My little friend was, after all, but the unfortunate owner of a " congenital heart."

G. E. D.

Correspondence

Why Animals Lick Their Wounds

To the Editor of the GAZETTE

SIR,—I was very interested in reading a paper printed in the *Gazette*, dated 12th August, entitled " Dentistry and Care of the Mouth —Aids to Health and Beauty," by C. Doswell Wallis, Esq., L.D.S., R.C.S. Eng., etc.

There is one point, however, on which I feel I must express an opinion.

Mr. Doswell Wallis, in remarking on the favourable conditions prevailing within the mouth, says among other things that the mouth " is constantly irrigated with a healing fluid—the saliva (compare how animals will lick their wounds, with curative effect)."

About twenty years ago, Charles H. Duncan, M.D., of New York, published his momentous book on autotherapy after having proved his contentions through actual practice over a number of years.

One day a man was brought into hospital, having been run over. Infection had set in and, in spite of all available treatments, his life was despaired of. Dr. Duncan, as a last resort, took a few drops of pus from the patient's wound and

placed them into his mouth. Within two days the purulent discharge disappeared, and the patient became better in every way. Soon afterwards Dr. Duncan had an opportunity of making tests on further cases, with the same gratifying results. Sometimes the doses were camouflaged with grape-juice or triturated with sugar or milk or distilled water; the effects, however, were always the same, provided the dosage was properly regulated.

To prove that it is for the purpose of transferring pus from the wound to the mouth that a dog licks his wounds, Dr. Duncan obtained an injured dog for observation and experimentation. He took a dog with a deep foot wound, gave the dog a private room in a hospital, then put a plaster cast on the dog in such a way that it was unable to touch the wound with its tongue. Then he dressed the wound daily with antiseptics and sterile gauze, just as he did his human patients.

Infection set in in the dog's foot, and progressed for three weeks until the dog was about to die. He had stopped eating, sleeping and drinking. His eyes were listless and his mouth drooped. The foot was swollen and filled with pus. At this point Dr. Duncan took three drops of pus from the wound and gave them to the dog in a teaspoon. The dog started licking his chops eagerly, something he had not done for days. Dr. Duncan then drained additional pus from the wound for future treatment. In twenty-four hours the remaining pus in the wound had dried. The dog was given more of the pus, and in thirty-six hours healthy tissue began to form. In one week, with repeated treatment, the dog was well.

Dr. Duncan and others who followed his system cured a large number of cases of infection of many kinds and in all parts of the body. Dr. Duncan first made his discovery in 1909, thirty years ago, and I believe his contentions were recognised as being sound soon after the publication of his book, and yet we still hear medical and dental men, for Mr. Doswell Wallis is by no means the only one, talking about the healing properties of the saliva, *as evidenced by the fact that animals lick their wounds*.

The saliva may have slight healing properties, but whether it has or not, that is not the reason animals lick their wounds.

I should like to tender my apologies for having written this letter in haste, but unfortunately I cannot give more time to it at the present moment.

With my best compliments to your valuable journal.

Yours, etc.,
M. E. GASCOINE, L.D.S. Eng.
1, Cavendish Place,
91, South Side, Clapham Common, S.W.4.

The Lay Staff

To the Editor of the GAZETTE

SIR,—I would inform you that to preserve the Hospital records a temporary Counting House has been established at Purley, and some delay may arise in answering enquiries, for which indulgence is asked. All enquiries should be made, in the first instance, in the Counting House, at which a skeleton staff is maintained.

The majority of the lay staff have been transferred to hospitals in the Sector, and it is hoped that those not already placed will be found suitable posts in the future.

It may be important to state that all Guy's Hospital employees transferred to other hospitals are regarded as seconded for duty only, and have not ceased to be Guy's Hospital employees, although for the purpose of convenience they may be paid by the hospital to which they are attached.

Superannuation Contributions in respect of such transferred employees will continue to be paid by Guy's.

The Authorities of Guy's will recall such employees for service in the Hospital as and when required.

Yours, etc.,
B. L. READ,
Clerk to the Governors,
Lay Sector Officer (*Sector* 10).
Guy's Hospital,
S.E.1.

The Works Department

To the Editor of the GAZETTE

SIR,—The following are a few particulars of the work done by the Works Department at the outbreak of hostilities.

In various parts of the Hospital steel scaffolding and timber supports were fixed. Some 22,000 sandbags were filled and placed in position, the amount of sand used being approximately 500 cubic yards.

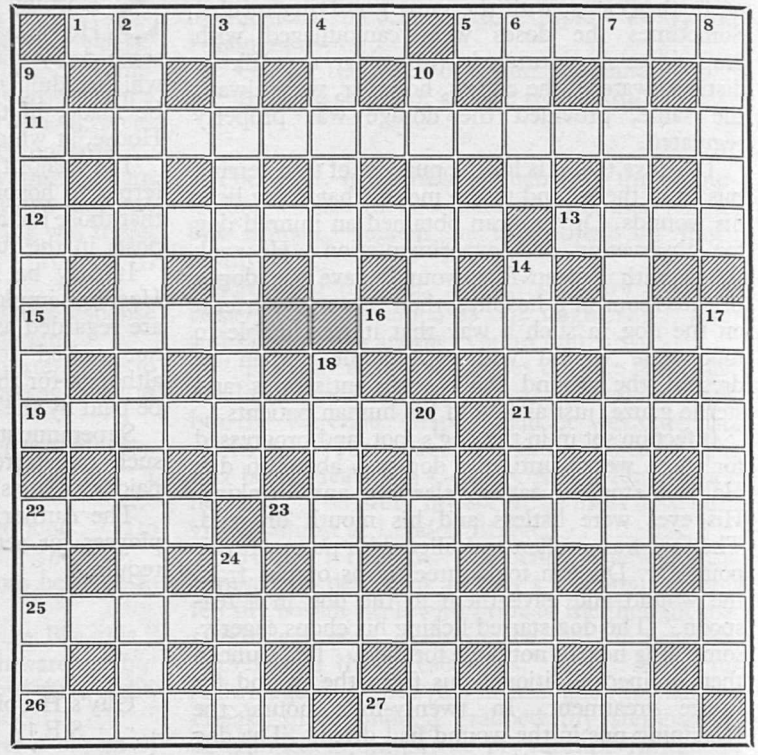
The trenches are approximately 280 feet long. This entailed the excavation of 250 cubic yards of earth. Some 5,000 square feet of timber was used in the lining and strutting and electric light and telephone point were provided. The excavation in places was very difficult owing to old brickwork foundations and old water and electric mains being encountered. The old Central Station steel chimney was cut, hauled round from store yard, placed and bolted in position, the steel chimney sections weighed approximately 10 tons.

Twelve to fifteen hundred electric lamps were sprayed with blue paint and installed in various places in place of the white ones.

(*continued on page* 309)

Crossword No. 5

By "Pepsin"



ACROSS

1. Touching when man is sunburnt.
5. Skin disease.
11. Way of all flesh (2 words—10 and 5).
12. Berger rhythm?
13. Backward fools' resorts?
15. Called in Spenser but ends in exercise.
16. O the rats to give an instrument!
19. Quick in perception.
21. Secreting structure.
22. Generated.
23. Relating to outer covering of embryo.
25. Self-retaining dressing.
26. Inviting spot!
27. Modern poetry is contrary.

DOWN

2. Mesmerism (2 words—6 and 9).
3. Type of fracture.
4. (Rev.) Burnt black by the sun? No, multi-coloured.
6. Erode with acid.
7. In that Polish map is an eye disease.
8. Aperients used in the Navy?
9. Orthopædic surgeon?
10. Sometimes firstborn.
14. Flock together.
17. Small fry.
18. Constraining.
20. Constipated.
22. The degree, thus, is fundamental.
24. A slip made by children.

SOLUTION No. 4

Notes

ACROSS

9. "Water, water, everywhere, Nor any drop to drink."
21. Austin + Flint = a heart murmur.
26. Tr—ache—a.

DOWN

1. Sw—add—le.
5. Throw-back.
6. A.B. + bey.
20. Anag. of one part.
23. M—altos—e.
28. Anag. of peas.
29. Do + or.

SOLUTION No. 4

S	S	B	E	T	A	F	A							
W	A	T	E	R	O	N	T	H	E	B	R	A	I	N
A	Y	U	N	R	B	I	O							
D	U	L	C	I	T	E	O	C	E	L	L	U	S	
D	I	T	R	A	M	W	A	Y	U	M				
L	I	S	T	E	A	L	B	R	E	I				
E	H	A	E	M	A	T	O	C	E	L	E	A		
		L	A	I	U	A								
P	A	U	S	T	I	N	F	L	I	N	T	M		
R	A	T	S	O	E	A	D	A	T	A				
O	T	D	E	T	R	L								
T	R	A	C	H	E	A	D	E	F	U	N	C	T	
E	C	A	P	O	O	I	O							
A	N	K	Y	L	O	S	T	O	M	I	A	S	I	S
N	S	E	E	R	L	H	E							

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 3rd October.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 4: A. Gordon Taylor, St. Albans.

1,500 windows were painted black, together with skylights, etc.

Emergency Theatres were equipped from Guy's House Theatres, air-conditioning plant installed, also sterilisers and scialytic lights. The Patients' Library was cleared to provide a sterilising room.

About a thousand windows have been fitted with black curtains, using 1,600 yards of material, and about 300 dark blinds.

Wire mesh screens to provide protection from broken glass have been fitted to approximately 200 windows, the Gas Decontamination Room in Massage Basement has been fitted with water sprays, air locks and ventilation and air-conditioning plant.

It is worth while mentioning that at the early part the Works Department Staff were working 12 to 16 hours per day, including Saturday and Sunday, and the whole staff requested ordinary day or hourly rates be paid instead of the usual Trade Union rate of double pay for week-end work and overtime to which they were entitled, and that outside people were canvassing their services for A.R.P. work in the district.

It is a source of satisfaction to see demonstrated the willingness of all members of the staff.

Yours, etc.,

WM. GREENWOOD,
Clerk of Works.

Guy's Hospital, S.E.1.

Appointments

The War Emergency Medical Service

STAFF ATTACHED TO GUY'S HOSPITAL

Deputy Medical Superintendent—
Dr. P. M. F. Bishop.
Surgical O.C.—
Mr. F. Cook.
Surgeons—
Mr. H. J. B. Atkins. Mr. V. E. Lloyd.
Mr. J. E. Spalding. Mr. H. A. Hamilton.
Anæsthetist—
Mr. A. Shein.
Physicians—
Dr. E. H. Rink. Dr. G. A. M. Lintott
Medical Officers—
Dr. W. N. Mann. Dr. D. N. Leeming.
Dr. E. B. French. Dr. C. S. Darke.
Dr. D. Erskine. Dr. W. Neustatter.
O.C. Gas Decontamination—
Dr. H. N. Garrus.
Radiologist—
Dr. T. H. Hills.
House Officers—
L. Nancekievill. I. E. J. Thomas.
R. E. Horton. P. S. Silver.
A. C. C. Hughes. W. D. Brinton.
C. H. J. Rey. J. A. Bowen-Jones.
S. H. Llewellyn-Smith. G. N. Wright.
Dental Surgeons—
Mr. F. S. Warner. Mr. R. O. Holland.
Pathologist—
Dr. E. H. Koerner.

GUY'S HOSPITAL STAFF ATTACHED TO FARNBOROUGH HOSPITAL

Surgical O.C.—
Mr. R. Davies-Colley.
Surgeons—
Mr. Grant Massie. Mr. T. T. Stamm
Mobile— (*Orthopædic*)
Mr. R. J. Cann. Mr. R. C. Brock.
Mr. G. F. Gibberd.
Anæsthetists—
Dr. T. A. B. Harris. Mr. W. W. Gilford.
Physicians—
Dr. Schott. Dr. Felix Brown.
Dr. L. Forman. Dr. N. Mutch.
House Officers—
K. S. MacLean. H. Stott.
C. K. Cole. E. S. Nicholson.
J. A. L. Leeming. D. S. Clark.
E. J. F. Hinde.
Ophthalmic Surgeon—
Mr. P. M. Moffatt.
Dental Surgeons (probably Anæsthetists)—
Mr. R. E. Rix. Mr. W. E. Herbert.
Radiologist—
Dr. W. Lindsay Locke.

GUY'S HOSPITAL STAFF ATTACHED TO ORPINGTON PUBLIC ASSISTANCE INST.

Surgical O.C.—
Mr. L. Bromley.
Surgeons—
Mr. A. J. McNair.
Mobile—Mr. J. S. Batchelor (*Orthopædic*).
Anæsthetist—
Dr. E. A. Scott.
Physicians—
Dr. J. M. H. Campbell. Dr. S. Behrman.
Dr. R. T. Grant. Dr. E. R. Boland.
Medical Officers—
E. B. G. Reeve. D. M. F. Carter.
P. G. Epps. A. D. Bell.
T. M. L. Price. R. V. Coxon.
Dental Surgeons—
Mr. H. L. Messenger. Mr. G. B. Pritchard.
Radiologist—

GUY'S HOSPITAL STAFF ATTACHED TO PEMBURY COUNTY HOSPITAL (BASE HOSPITAL)

Surgeons—
Mr. E. C. Hughes. Mr. Philip Turner.
Consulting Orthopædic Surgeon—
Mr. C. Lambrinudi.
Anæsthetist—
Dr. A. D. Marston.
Physio-therapist—
Dr. E. J. Crisp.
Physicians—
Dr. E. P. Poulton. Dr. N. M. Jacoby.
Dr. A. A. Osman. Dr. H. W. Barber.
Dr. H. C. Cameron. Dr. W. G. Tillman.
Dr. H. Vertue. Dr. R. W. B. Ellis.
Ophthalmic Surgeons—
Mr. O. G. Morgan. Mr. A. W. Ormond.
Mr. F. R. Jamieson.
House Officers—
A. J. Drew. J. Y. D. Wakeham.
N. A. Neville.

Dental Surgeons—
Mr. F. N. Doubleday. Mr. F. Bocquet Bull.
Radiologist—
Mr. J. F. Carter Braine.
Pathologists—
Prof. G. W. Nicholson. Dr. J. H. Ryffel.
Dr. F. Knott. Dr. A. Bulleid.
Dr. R. L. Waterfield.

GUY'S HOSPITAL STAFF ATTACHED TO JOYCE GREEN AND THE ORCHARD HOSPITALS, DARTFORD, L.C.C.

Surgical O.C.—
Mr. W. H. Ogilvie.
Surgeons—
Mr. W. D. Doherty. Mr. N. L. Eckhoff.
Medical Officer—
Dr. M. J. McArthur.
Anæsthetists—
Dr. W. S. McConnell. Dr. A. G. Johnson.
Physicians—
Dr. A. H. Douthwaite. Dr. S. Suzman.
Dr. J. R. Forbes.
Medical Officers—
F. J. R. Stoneham. F. N. Glover.
J. S. Crone.
Radiologist—
Dr. C. F. Cosin.

GUY'S HOSPITAL STAFF ATTACHED TO OTHER HOSPITALS IN SECTOR 10.

BROOK HOSPITAL, SHOOTER'S HILL

Surgeon—
Mr. J. V. Clark.

GROVE PARK HOSPITAL, L.C.C.

Surgeons—
Mr. J. B. Blaikley. Mr. P. W. Clarkson.
Mr. S. H. Wass.
Anæsthetists—
C. W. Kesson. A. M. Hutton.
J. M. French. P. H. Birks.
Dental Surgeon—
Mr. K. Hooper.

PRESTON HALL, near MAIDSTONE

Surgical O.C.—
Mr. E. G. Slesinger.
Medical Officer—
E. I. Davis.
Dental Surgeon—
Mr. M. A. Rushton.

DARTFORD COUNTY HOSPITAL

Surgeon—
Mr. H. R. S. Harley.

BEXLEY MENTAL HOSPITAL

Surgeon—
Mr. J. M. Brown.

Hospital Information, etc.

Pass List

UNIVERSITY OF CAMBRIDGE.

The following degree has been conferred.

BACHELOR OF MEDICINE AND SURGERY.

K. S. MacLean.

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
August, 1939.

Surgery.
J. L. Braithwaite *E. Smith
D. B. Roberts H. F. Spalding
Medicine.
M. E. Davies G. L. L. Reynolds
Forensic Medicine.
M. E. Davies G. L. L. Reynolds
Midwifery.
C. Bucknall P. S. Clarke
D. W. Burnford K. W. N. Palmer

* Has completed the examination.

Papers by Guy's Men

Burgess, Norman. The seborrhœic dermatoses. *Bristol Med. Chir. J.*, 1939, lvi, 127.

Worster-Drought, C., and Another. Achlorhydric hypochromic anæmia associated with peripheral neuritis. *Brit. Med. J.*, 1939, ii, 273.

Worster-Drought, C. Observations on persistent and recurrent headache with special reference to migraine: Part II—Migraine. *Post-Grad. Med. J.*, 1939, xv, 309.

Ryle, J. A. Visceral neuroses—I. *Lancet*, 1939, ii, 297.

—— II.—*Ibid.*, 353; III.—*Ibid.*, 407.

Poulton, E. P. Local tissue anoxia and its treatment, with special reference to rheumatic myocarditis. *Lancet*, 1939, ii, 305.

Blacker, C. P. Maternity and child welfare work. *Eugenics Review*, 1939, xxxi, 91.

Howitt, Frank D. The diagnosis and treatment of chronic articular rheumatism. *Practitioner*, 1939, cxliii, 246.

Shackle, J. W. Laboratory investigations in chronic rheumatism. *Ibid.*, 297.

Gillespie, R. D. Psychology for dental surgeons. *Brit. Dent. J.*, 1939, lxvii, 226.

Changes of Address

Lt. R. W. F. Brotherton, A.D.C., Dental Centre, Cambridge Road, Portsmouth.

Group Capt. J. J. Conybeare, R.A.F., Halton House, near Aylesbury, Bucks.

Lt. E. J. F. King, A.D.C., Horse Cross, Braughing, Hertfordshire.

Surg.-Lt. H. D. Lamb, R.N., Royal Naval Barracks, Devonport.

W. A. Maggs, M.R.C.S., L.D.S., Rose Hill, Bideford, Devon.

Miss A. Wilkinson, 333, Baring Road, S.E.12.

Lt. G. V. L. Williams, A.D.C., c/o Glyn, Mills & Co., S.W.1.

Lt. R. O. Yerbury, I.M.S., c/o Indian Office, S.W.1.

Births

BUNYAN.—To Helen, wife of Surgeon-Lieut. (D.) John Bunyan, R.N.V.R., on August 19th, 1939—a daughter, Susan Jane.

Marriages

BARNARD—THOMAS.—On Saturday, 16th September, 1939, quietly at the Parish Church of St. George the Martyr, George E. Barnard to Gwenllian M. Thomas (Sister Surgery).

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *7th October* 1939 — *Number* 1336

PASSIM

WHEN the pattern of one's life is destroyed at a stroke, when the present is unenticing and the future may hold death and destruction, it seems to us comforting to read how our forefathers have got themselves into very much worse straits and have survived them nobly. When in the prosperity of peacetime one reads of murder, rape and famine, they seem unreal, apart from common experience. But now war has come and Poland has been divided, they seem less unreal. It is good to remember that the spirit of some men burns with an unquenchable flame.

We apologize for this first ponderous paragraph. You must bear with it and ascribe it to the war. But recently, with greater leisure, our reading has been wider. We have read of strange events and intriguing people. For instance, Plutarch records that when Marius sent his soldiers to 'take off' (Dryden's phrase) Mark Antony the orator, the soldiers 'endeavoured to shuffle off the murder from one another; for so great it seems were the graces and charms of his oratory, that as soon as he began to speak and beg his life, none of them durst laud or so much as look upon him; but, hanging down their heads everyone fell-a-weeping.' And we have read of brave men bearing with great misfortunes. Two men in particular have impressed us.

The first of these is Quintus Sertorius, a Roman living in the time of Pompey the Great. Sertorius gained much honour for his valour in war, but when prosperity and political power seemed his, fortune turned from him. His political rivals destroyed his party and he was forced into exile in Spain. There, with a few Roman friends, he raised an army of 'Spaniards and Lusitanians,' subjugated much territory and established a government. His Roman rivals would not allow him to rest in peace. Four great armies were sent against him. He defeated or evaded all of them. His fame spread. At the height of his power he asked to be allowed to return to Rome to live as a private citizen, but his request was not granted. Further armies were sent against him. He dispersed them. He fell eventually to the dagger of a man he supposed his friend. Sertorius is said to have been of a temper unassailable either by fear or pleasure, in adversity and dangers undaunted, and noways puffed up with prosperity. In his adverse fortune he showed undaunted courage and behaved himself towards his enemies in a manner free from all objection and mean spiritedness! A genuine peace lover Sertorius was forced into war to defend his life from his enemies.

The second is Miguel de Cervantes Saavedra, author of Don Quixote. At the age of 28, after serving with the Christian armies against the Turks, he was captured and enslaved by Moorish Corsairs. For the next six years he endured extreme miseries and hardships. He continually plotted his and his fellow slaves' escape and the overthrow of his Moorish captors—" this at the continual risk of his own life, for no less than four times did he incur the nearest peril of being strangled, impaled, or burnt alive, by reason of the bold things on which he adventured, in the hope of bestowing liberty upon many." In the end he escaped to enrich the world in his late middle life with Don Quixote.

SEVERAL matters of great ultimate importance to Guy's men are touched on in a notice and correspondence in this issue. Medical education, both undergraduate and postgraduate (we apologise to Mr. Layton for the antithetical distinction), have both to be adapted to the needs and conditions of war.

The organisation of the social life and recreation of our community faces fundamental alterations. We mourn the threatened decease of our great contemporary, the *Guy's Hospital Reports*, though we are confident of its eventual resurrection; we are confident that the *Guy's Hospital Gazette* need not suffer even a temporary eclipse.

None of these questions have been finally dealt with, but the appropriate authorities are busy considering them. To produce comment at this stage would hinder rather than help them, and it would be mischievious to report rumours, but as soon as any final decision is made, the *Gazette* will inform its readers.

ON a later page of this issue, we publish an account of what has become a weekly event, "The Starlings' Revue." But there are two weekly concerts at Guy's, and we would be churlish if we did not express our gratitude to the professionals who play and sing to us on Tuesday evenings. These concerts are organised by Tom Ronald, Senior Production Manager of the International Broadcasting Company, who is a friend of Dr. Bishop, and who is willing to do a great deal of hard work for our amusement with no financial return. We wish to thank Mr. Ronald and the skilful artists whom he brings to Guy's for the pleasure which, with the traditional generosity of the stage, they have given us.

IN the list, published in the last issue, of staff appointments in the Emergency Medical Service, Dr. E. H. Rink was shown as a Physician attached to Guy's, he is really, of course, our Senior Anæsthetist.

A HOSPITALS and Red Cross combined Flag Day is to be held on Tuesday, October 10th. To make it possible for those who give their services on these occasions, and who now have National duties to perform, the selling of flags will take place from early morning to 1 p.m. only.

Volunteers, whose assistance is urgently required to make the collection a success, should call at the Court Room, Guy's Hospital, on the afternoon of Monday, October 9th, after 2 p.m.

The Surgical Treatment of Paralysis

A Clinical Lecture delivered at Guy's Hospital by T. T. Stamm, Esq., F.R.C.S.

GENTLEMEN,—The problem of improving the function of paralysed or partially paralysed limbs is one of the most fascinating in the whole of surgery. Although during the last thirty years many different methods have been tried out, and great advances have been made, we are far from having achieved standardisation of method, and the problem is still in the experimental stage. Indeed, it is doubtful whether complete standardisation of procedure can ever be realised, as each new case presents a different combination of paralytic elements, which have to be considered in their relation to each other, before any scheme of treatment can be worked out. Certain fundamental principles and procedures are, however, gradually being developed, and I wish to-day to draw your attention to the general lines upon which we are thinking at the present time and the conclusions that we have arrived at.

The mechanical parts of the body function as a series of machines working on the lever principle. This type of machine consists of three essential components: a lever to be moved, a fulcrum about which it moves, and a motive force to move it against resistance. In the human body the bones form the levers, the joints the fulcra, and the muscles supply the power. Failure of any one of these components causes the machine to break down. In paralysis it is the motive force that has failed, the machine being otherwise unimpaired in most cases. By this failure the mechanism is not only rendered powerless to move against resistance, but is also unable to support a load, and therefore tends to collapse under the force of gravity, and is unstable. Thus we have two factors to consider: (1) the failure of movement and propulsion, and (2) the instability.

Owing to the fact that paralysis is rarely complete in any limb, some of the lever systems may be left with muscles that pull them in one direction but not in the other, so that the part is held permanently in one extreme position, thus inducing a third factor—that of deformity.

Since orthopædic surgery began as the art of correcting deformities, it was natural that the attempts to deal with these cases by surgical means were first directed towards the correction of the obvious and visible deformities present. When it was found that these deformities, often could not be corrected by the use of splints, tenotomies of the contracted structures were performed and, later, actual division of the bones. These measures, of course, did little towards the im-

proving of function. Later on, when the improvement of function rather than the correction of deformity became the main interest of orthopædic surgeons, these measures failed to give satisfaction. It was then equally natural that their attention should be directed towards the muscles, which are the primary cause of the failure in function. It was then that the procedures of muscle and tendon transplantation came into vogue. The aims of these procedures were to redistribute the remaining muscles in a limb so that they would be more evenly balanced, and would replace paralysed muscles for the more essential actions. For example, suppose all the flexor muscles of a joint were paralysed, while the extensors remained unaffected. In such a case, some of the extensors would be transplanted so as to act as flexors. It was thus hoped to regain the essential flexor action and also to obtain a more even balance of muscle power so as to prevent a deformity occurring in the position of extension.

Difficulties were, however, very soon encountered, for it was found to be impossible to train a muscle to perform an action antagonistic to its normal one, and often the only result was merely to put one more muscle out of action.

Further, although in certain situations the method was, and still is, used with success, in so many cases the extent of the paralysis made it impossible to regain control of all the joints in a limb.

Thus a third line of attack had to be evolved, namely, to fix permanently those joints which were not essential for the most important functions of the limb, and which could not otherwise be rendered stable. This was found to give such good results in certain situations that for a time the procedure of tendon transplantation almost died out. It was very soon appreciated, however, that after a joint had been fixed any remaining unparalysed muscles, which only worked over that joint, could now be freely transplanted so as to work the remaining joints. Further, it was found that, if unparalysed muscles were left to pull against a joint which had been fixed, they would gradually induce a deformity at that joint, even though bony anchylosis had been obtained. Tendon transplantations are therefore being employed again more frequently, but now as accessory measures after the essential preliminary stabilisation of uncontrollable joints by operative fixation. In many cases these transplanted muscles function very little in their new situation, but even so their tendency to induce a deformity in the joints which have been fixed will be nullified by the procedure, which is thus, in such cases, little more in effect than a tenotomy that is prevented from joining up again. In other cases, of course, they may serve a useful function in their new situation, provided that their new action is not antagonistic to their natural one.

As has been explained, the operative fixation of joints were at first performed merely in order to effect stabilisation. More recently one further development has taken place. In many parts of the body the mechanics are most complex and require many different muscle actions for their control. The essential functions of a limb could, however, be performed reasonably well with far simpler mechanical arrangements, and where only a few muscles are available, it would clearly be of great advantage if the mechanics of the part could be simplified. It has been found possible to do this in certain situations. The fixation of flail joints, although originally performed merely to effect stability, automatically achieves this result to some extent, and these operations have now been modified in certain situations with this end in view. In other regions, other measures can be adopted, such as osteotomy, whereby the line of action of the lever is altered. I will give you examples of these later.

So we arrive at our present-day programme, which thus consists of the following plan of action :—

1. The stabilisation by arthrodesis of certain joints which are not essential for the most vital functions of the limb.

2. The planning of the above operations, and of any other possible measures by which the mechanics of the part may be simplified where necessary.

3. The transplantation of muscles (*a*) to prevent unequal stresses on joints which have been fixed, and (*b*) to provide a new action for them when the joint over which they normally work has been fixed.

4. The correction of any residual deformity which may interfere with function.

Two interesting points may be noted : First, that the procedures are now considered in the reverse order to that in which they were invented ; and second, that in the development of our present technique, first the deformity only was considered, then the motive force, then the fulcra, next the levers, and now finally the whole machine together. It would appear, therefore, that further advances will probably follow much the same lines as those we are working on now, and will be directed towards improving and perfecting our present ideas rather than developing any new principles.

We can now consider some practical examples to indicate how these ideas work out in practice.

STABILISATION OF A FLAIL JOINT

The shoulder joint affords a good example of the improvement in function to be obtained by the simple fixation of a flail joint. A flail and paralysed shoulder joint is not infrequently found in cases in which the rest of the arm is little affected. It is a very serious disability, for it renders the arm almost useless for most purposes, having to be lifted up by the other arm and placed on the table or some such support before the hand can be used. In such cases the shoulder joint is arthrodised so that a bony anchylosis is formed with the joint held in about 70° of true abduction, that is, in the plane of the scapula. The weight of the arm will cause the scapula to rotate so that it can hang by the side, but the arm can now be raised actively by rotation of the scapula in the opposite direction by contraction of the scapular muscles. A very considerable and useful apparent action range of movement of the shoulder is thus gained, and, moreover, the arm is now under complete control.

In certain situations stability of a joint can be achieved by altering the mechanics of some other joint. Where paralysis of the quadriceps muscle is associated with a fixed equinus deformity of the foot, the knee does not tend to flex and give way under body weight. The reason for this is that the equinus deformity throws the weight on to the fore part of the foot. The upward thrust is thus exerted in front of the line of the ankle and knee joints, and forces the knee into extension, thereby locking it. Advantage of this mechanism is taken in cases of quadriceps paralysis by so modifying the triple arthrodesis operation on the foot as to leave a certain degree of fixed equinus deformity, both the foot and the knee being thus rendered stable by one operation.

STABILISATION TOGETHER WITH SIMPLIFICATION OF THE MECHANICS

1. The foot affords the best example of the achievement of both stabilisation and simplification of the mechanics by the fixation of one joint. The human foot is a complex mechanism, but its only essential functions are :—

(*a*) to hinge backwards and forwards on the leg ;

(*b*) to act as a lever of the second order to propel the body forwards in walking or running, as shown in Fig. 1 ;

(*c*) to be able to " give " to some extent to unevenness in the ground, particularly in its front part.

The ankle joint itself, being a simple hinge joint, held in a strong bony mortice, remains stable under body weight, even in the absence of muscle power, and *never* requires fixing in cases of paralysis.

The subtalar joint, on the other hand, depends entirely upon the muscles for its stability, and when they are paralysed the foot collapses to one side or the other at this joint under body weight. This joint must therefore be fixed, together with the talo-navicular and calcaneo-cuboid joints, as these three joints always work together. The talus, calcis, cuboid and navicular are thus converted into one bone, which not only renders the foot stable, and consolidates it, so that it is better able to act as a rigid lever, and also considerably simplifies its mechanics, for the foot now only moves in one plane—that of the ankle joint. It still retains a certain amount of " give " as cuneiform joints have to lift. Thus, although it

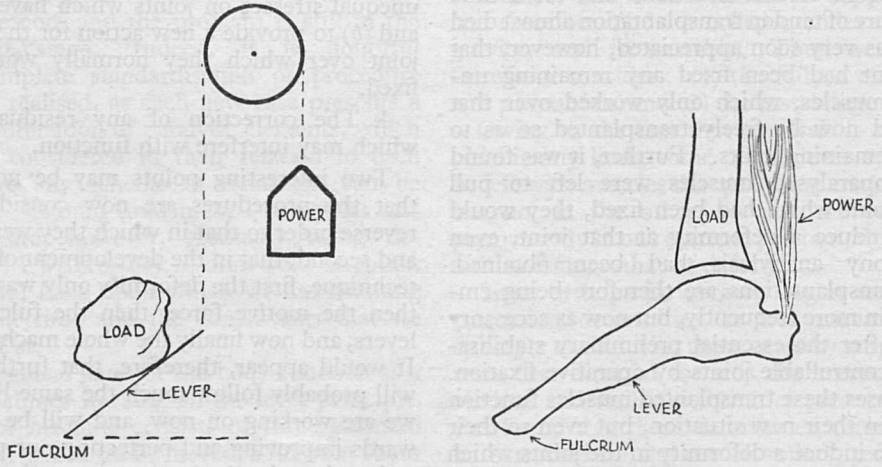


Fig. 1.

Showing how the foot functions as a lever of the second order.

Foot acting as a lever of the second order when propelling the body forwards, with the fulcrum at the metatarsal heads, the force being supplied by the tendo Achilles group of muscles.

has now been converted into a more simple mechanism, it can still perform its three essential functions.

This operation can be modified in several ways to correct any deformities present, as will be mentioned later.

2. An example of an operation performed purely in order to simplify the mechanics of a joint is afforded by cases of paralysis of the hip. The power of active abduction of the hip joint is the only essential controlled movement required for walking—for the movements of flexion and extension can be effected even in the absence of muscle power by the natural tendency of the leg to swing as a pendulum. Unless the abductor can function, however, the pelvis collapses to the opposite side, when the weight is borne on the affected leg, causing the patient to overbalance—the so-called " Trendelenburg " sign.

If the abductor muscles are completely paralysed, arthrodesis is the only means by which this effect can be controlled. In cases where some abductor power remains, however, an osteotomy can be performed as shown in Fig. 2, whereby the upper end of the femur is converted into an open L in the opposite direction to the normal. The effect of this is to convert the hip almost into a hinge joint. The pelvis sits on the upper limb of the L and movements of flexion and extension only are possible, with the exception of a small range of abduction. For this reason some abductor power is necessary, but the osteotomy, by depressing the greater trochanter, separates the origin and insertion of the abductor and so, to some extent, increases their leverage.

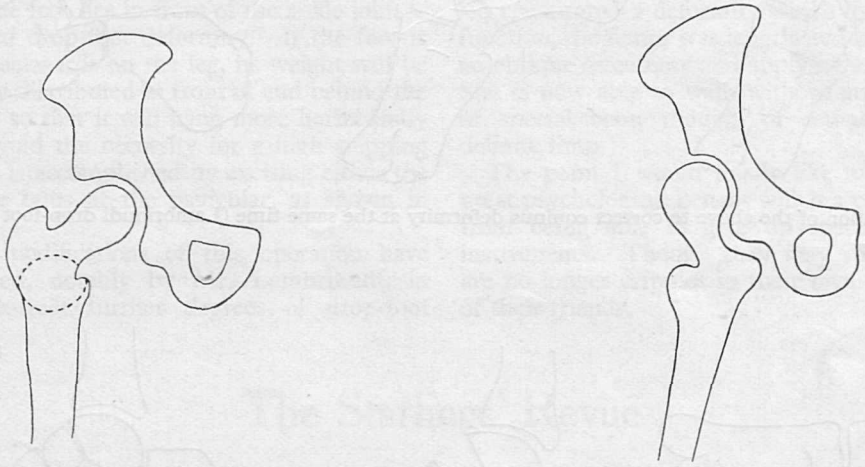


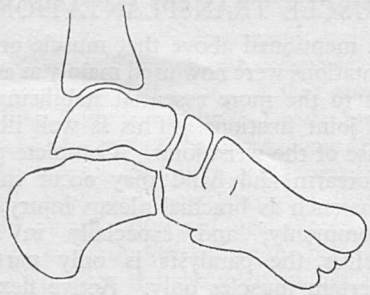
Fig. 2.
To show the result of osteotomy of the femur performed to stabilise a paralysed hip joint.
Osteotomy of the femur to increase stability where there is weakness of the abductor muscles.

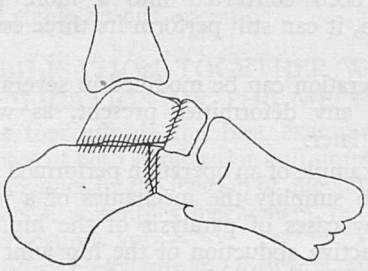
MUSCLE TRANSPLANTATIONS

It was mentioned above that muscle or tendon transplantations were now used mainly as accessory measures to the more essential stabilising procedures of joint fixations. This is well illustrated in the case of the wrist joint. Complete paralysis of the forearm and hand may occur in certain conditions such as brachial plexus injury, but far more commonly, and especially in anterior poliomyelitis, the paralysis is only partial and affects certain muscles only. Active flexion and extension of the fingers and thumb are the only essential actions for some degree of function, and it frequently happens that one or other of these groups are paralysed while some of the muscles of the wrist joint are unaffected. In such cases the wrist joint is first arthrodised in slight dorsiflexion, as this is the best functional position, and then the unparalysed flexors or extensors of the wrist can be transplanted into the paralysed tendons of the fingers or thumb.

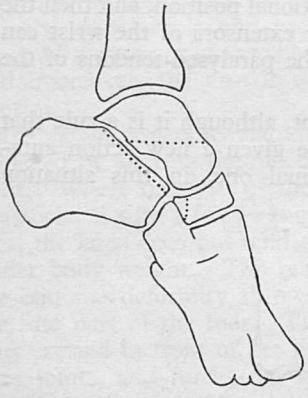
It may be noted that, although it is a rule that muscles should not be given a new action antagonistic to their normal one, in this situation extensors of the wrist may be transplanted to act as flexors of the fingers. The reason for this apparent paradox is that these actions are not really antagonistic, for under normal conditions the wrist is always held in dorsiflexion when the fingers are being flexed.

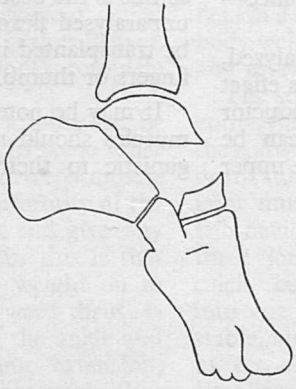
The method of muscle transplantation is still found to be of use by itself in certain situations. Paralysis of the biceps and brachialis affords a good example. In such cases the only remaining muscles which have any flexor action on the elbow

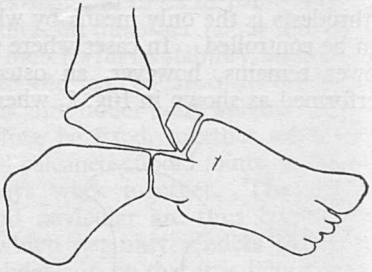




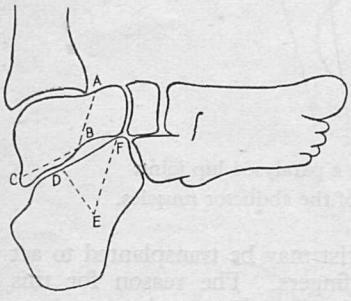
(*a*) Triple arthrodesis, with back ward displacement of the foot obtained by excising the head of the talus, to stabilise a flail foot.

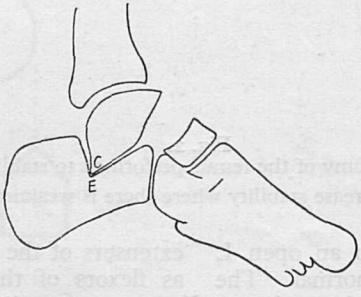


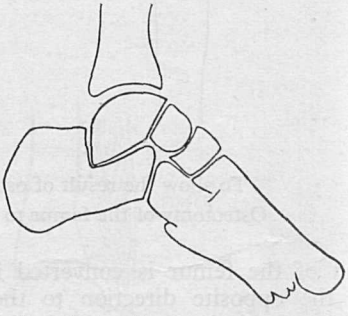




(*b*) Modification of the above to correct equinus deformity at the same time (Lambrinudi drop-foot operation).







(*c*) A further modification to correct the reverse deformity (Lambrinudi).

Fig. 3.

Modifications of the triple arthrodesis of the foot to correct various deformities.
(*a*) To displace the foot backwards, excision of scaphoid (Dunn's operation).
(*b*) Another method, excision of head of talus (Hoke).
(*c*) To correct " equinus " deformity (Lambrinudi).
(*d*) To correct " calcaneus " deformity (Lambrinudi).

joint are the extensors of the forearm, as they arise in part from the humerus above the level of the elbow joint. Their power as flexors of the elbow, however, is poor, as they act at a great mechanical disadvantage. By transplanting their origin to a more proximal level on the humerus their leverage is increased and the power to flex the elbow greatly improved.

CORRECTION OF DEFORMITY

This is usually the last stage in the treatment of these cases, any remaining deformities being corrected by osteotomy, or division and lengthening of soft parts. Frequently, however, a deformity can be corrected at the same time as the stabilising operations are performed.

In the case of the foot it has been shown that the fundamental stabilising operation consists in the so-called triple arthrodesis. If a valgus or varus deformity of the foot is present, this can be corrected at the same time by removing more bone from the inner or outer parts respectively of the talus and calcis.

Further, a paralysed foot tends to hang in plantar flexion, owing to the fact that most of the weight of the foot lies in front of the ankle joint—the so-called drop-foot deformity. If the foot is displaced backwards on the leg, its weight will be more evenly distributed in front of and behind the ankle joint, so that it will hang more horizontally and thus avoid the necessity for a high stepping gait. This is accomplished by excising either the head of the talus or the navicular, as shown in Fig. 3.

Further modifications of this operation have been devised, notably by Mr. Lambrinudi, in order to correct further degrees of drop-foot deformity or its reverse. Diagrams explaining these operations are also shown in Fig. 3.

In conclusion let us consider an actual case to see how these various procedures are combined together to give the best functional result.

A girl of seventeen had been paralysed in the right leg for several years as the result of an attack of anterior polyomyelitis.

All the muscles of the hip were paralysed, as a result of which the hip had become dislocated. There was slight power in the quadriceps and hamstring groups, but not sufficient to prevent the knee giving way. The foot was completely paralysed.

The following programme was carried out. A modification of the triple arthrodesis was performed on the foot, so that a slight degree of drop-foot was produced. The foot was also displaced backwards to shorten it, so that it would not tend to drag on the ground, in view of the equinus. This made the foot stable to stand on and the equinus deformity served to stabilise the knee joint, as has been explained earlier.

The hip was then arthrodised as it was obviously uncontrollable. Finally, as the shortness of the leg constituted a deformity which interfered with function, the femur was lengthened by performing an oblique osteotomy and applying screw traction. She is now able to walk without any instrument or special boot, though, of course, she has a definite limp.

The point I would finally like to stress is the great psychological benefit which a patient derives from being able to give up special boots and instruments. Though they may still limp, they are no longer cripples in their own eyes or those of their friends.

The Starlings' Revue

A DAY or two after the War started, three people were talking in the park; "Well, that's definite; we'll have a concert party," said Producer Tom Hills, "but what are we going to call it?" There was a pause, and Stage Manager John Musgrove said "Gosh! what an awful noise these birds are making. Whatever are they?" "Starlings," replied Bill Trethowan who had come in to see about some music. "Let's call it 'The Starlings' Revue," said all three as one. So was the idea born.

Since then, we have had three Starlings' Revues, and one Concert Party. Each revue seems to get better and better, and although the concert party was not perhaps quite as good as the Starlings' shows, that was probably due to the fact that Gerry O'Gorman was not on that particular occasion present to weld the show together with his inimitable patter.

The first revue was probably 'made' by the first public appearance on the stage of the old firm of Atkins and Rink, who, aided and abetted later, by Miss Brenda Perry, have taken part in nearly all successive shows. Then, of course, Gerry O'Gorman and his stooge John Gordon, who incidently has quite a sense of humour of his own, are towers of strength in the company; there seems nothing the former cannot do, and no character study is too difficult for him. However, it is not generally known that he was

on the music hall stage with the famous " O'Gorman Brothers " act ; his having been a theatrical family for many decades. His parody of Miss Elsie Salomons' native dance in the most recent revue was positively brilliant. Incidently I must make a special reference to the original dance which was completely different to anything we have yet had, and must also hand a bouquet to Miss Salomons for the splendid way in which she has trained the chorus.

Bill Trethowan, at the piano, is, of course, quite indispensable, and Pamela Waters, and he have given us some excellent numbers. He has also written several tunes for the shows, including the opening chorus. Pam Waters is probably known to most of you by her recent broadcast with " Band Waggon," and I feel we are very lucky in getting her assistance.

Another singer, a member of our own staff, Miss Evans, has also met with the most terrific reception on each occasion she has sung ; and Hodges and Palmer, " the two curates," have appeared once with great success.

Perhaps the greatest hit of the season, however, has been the " first public appearance this side of the Atlantic" of the two strong men, Androsterone and Testosterone. Needham and Budd were amazing in these two parts ; I am unable to say more because I cannot remember, I was laughing too much at the time.

Other acts which we have seen and enjoyed have been Scott and de Gruchy at the pianos, The Three Maestros and their guitars, Weston-Wells with his excellent recitations, and last but not least the Nuffield House Niggers. We have also had two bands, Dick Ponder and his light orchestra, and Bill Trethowan and his band, who put over some snappy numbers. There was also a wonderful surprise item in the form of Dr. Spurrell who, assisted by Baker, came on and began by lecturing about dietetics and finished by singing about eggs ; that lecture is almost unforgettable.

Now for the criticisms, these are few. The bedroom sketch by O'Gorman, Gordon and Peter Rawlings was remarkably funny, but was it in the best of taste ? Dyke and Company worked hard and the sketch about the eastern potentate was good, but some of their other work was not up to standard. The chorus is terrific, so why can't we see more of them ? Incidently " Les Girls " are the Misses Hunter, Wilson, O'Reily, Williams, Ferguson, Bowra, and Howarth. The last named has done good work in one or two sketches.

Well, that's all about the Revues. The producer must really be congratulated, may he go from strength to strength with his most unenviable task, and the stage manager does magnificent work in getting his props together and changing his scenes so quickly. I was allowed " back stage " last week and I know that a lot of the credit goes to the stage hands who work so amazingly hard and get no handclaps or thanks for a most important job.

I am looking forward to next Saturday !

" Theatre-Goer."

News from the Base

Pembury Letter

PICTURE to yourselves Pembury, a large overgrown village, almost a suburb of Tunbridge Wells, a string of Victorian mansions, villas and bungalows lying chiefly along a T of main roads, the home of the old and retired. It has two churches (one nice, one nasty), a hospital, several pubs and a swimming pool. Not many days ago the London-Hastings traffic roared through Pembury ceaselessly. Now petrol has been rationed and the roar has softened to an intermittent grumble. On Sundays the central green is the resting place of a host of charabancs. The pleasantest part of Pembury—and it is very pleasant—is its surrounding countryside, for Pembury nestles among green hills, quiet valleys, hop fields and delightful woods. These are now being touched by Autumn, the hops have all been picked, leaves are beginning to fall, and by night an immense harvest moon hangs in the sky turning darkness almost into day.

A few years ago Pembury Hospital was a workhouse and infirmary. Under the new Public Health Act it came to serve as a general hospital for the district and was enlarged and modernized. Now further new buildings are being added and it promises soon to become a large and excellent hospital. It has many pleasant and airy wards, good strong buildings, and one of the best operating theatres I have seen. It has deficiences—its sewage disposal system was designed to serve only 500 people—but because of the enormous increase in the potential number of beds and the staff required to serve them, temporary deficiencies must be expected. To accommodate 2,000 cases is its aim.

To this happily situated County Hospital have

moved Guy's honoraries, house officers, nurses and students. The list of honoraries and house officers has already been published in the GAZETTE. About 120 of the more senior medical students have been billeted in Pembury and are continuing their studies at this hospital. About 100 dental students are to move (or already have moved) to Pembury or Tunbridge Wells to continue their studies. About 120 nurses and 10 sisters live and work in the hospital.

Teaching is now well under way. The beds have been divided among firms. There are lectures held in a marquee tent each morning (there are several marquee tents camouflaged with brown and green paint), and rounds are conducted each afternoon. Teaching cases are not abundant. A week or so ago the Medical School acquired the fine premises of the old International Clinic in Tunbridge Wells to serve as a new medical school. Guy's students in Pembury are very fortunate in having Mr. E. C. Hughes as their dean.

The Pembury House officers have not been idle. Emergency surgery provided partly by hoppers, partly by local residents has kept them busy. 3,000 evacuated London children are billeted in the district and it is argued that these must provide more work for them pretty soon. Obstetrical business is flourishing. Even research work is not absent. Oxygen tents have mysteriously appeared and even a Drinker apparatus. It is rumoured that Dr. Poulton is to try both at once on some of the more troublesome patients.

Guy's nurses are having lectures and are not at present overworked. Half sleep in a marquee tent, half in the old workhouse. The bathroom boilers are not quite equal to washing all these new nurses. The nurses training school has moved to Tonbridge where it is carrying on.

Social life has not been restricted. While the sun shone, the bathing pool did good business; football teams have been raised; a successful dance has been held; a play written, produced and acted by Guy's talent has been given, and Professor Nicholson and Dr. Waterfield hold musical soirées in the largest of the pubs.

Well, sir, before closing this letter, I should pay some tribute to the staff of Pembury hospital and the Pembury residents for receiving our Guy's invasion with so few complaints and so little friction. If Pembury had invaded the Borough I fear we might have been less amicable. It must be that the graciousness of the Kent countryside permeates the Kentish inhabitants.

E. B. R.

Farnborough Letter

NOW that we have been here a month, that precious adaptability, so vital to all who have ever had to live in the College, has come to our aid: we may say in the words of preparatory school days that we have settled down pretty well.

In the continued absence of air raids we have no casualties to report other than those sustained on the Marital front. These we confess, are quite heavy.

Mr. W. Stott has ceased to exist as a bachelor.

Those of us who have had the pleasure of meeting his wife agree that, as always, he merits the most sincere congratulations. Mr. Jack Braithwaite has also got married. Moreover, he has got married twice since last we wrote. But on each occasion, we are happy to say, he married the same very charming bride.

Mr. David Carter has become engaged to Nurse McNaley, while Mr. A. J. Walker has claimed Nurse Stork. An impressive total, is it not?

Some of us, of course, remain at liberty. A rigid censorship; self-imposed, we hasten to add, forbids us to forecast the fate of these. But the capricious wind of rumour bears now and again the sound of distant heavy firing to our ears; and any day another resident or student may founder.

Contrary to persistent rumours, Mr. Leeming is still free and buoyant, we understand.

Messages from the front continue to reach us. At Guys the varied programme of entertainment has culminated, they say, in a visit from Group-Captain Conybeare in uniform.

Not to be outdone, we have had a dance. Despite the fact that no alcohol could be permitted on the premises apart from that brought in by the stomachs of the dancers, as suggested by Mr. Kersley Cole, none could deny that the dance was an established success.

Another is to be held shortly, and there are rumours of a concert next week, or even two concerts before long, one a professional affair and the other to be provided by local talent. Quite what the latter may bring forth we cannot venture to prophesy. An ominous sign is the report of nocturnal billiards players in the mess, that Mr. Stafford Clark has more than once been seen and heard in resolute song upon the platform.

A further diversion that we have enjoyed has been a Rugby Match against the nearest R.A.F. station. We understand that a full report from the touchline has been prepared by another correspondent. Speaking for the players we can

say that we thoroughly enjoyed the game although sharing with the German Air Force the experience of being outmanœuvred more than once by the R.A.F. The score was 14—6 in their favour.

Afterwards we enjoyed the customarily lavish R.A.F. hospitablity in their mess and succeeded in persuading some of them not immediately required for active service to come over to our local tavern for the evening.

Other distinguished visitors we have had include almost the entire staff, who descended in many wonderful cars for the meeting held here about a week ago. We were very glad to see them all again. Fellow residents from Guys and our incomparable ambassador to the provinces, Mr. Teddy Howell, polished, debonair, and immaculate as ever, have also been kind enough to visit us. We sincerely hope they will continue to do so.

Mr. Cormac has come to take up an appointment here, at least temporarily. He tells us that he may shortly depart to embark on a course of Public Health. Opportunities for such research were not lacking here recently, as an epidemic of " D. & V." struck nurses and men with sudden vehemence.

Its investigation was in the hands of Dr. Colbeck. His simple need of specimens for this provided Mr. McClintock, spokesman of the students, with an opportunity to deliver the most Rabelaisian after-dinner speech that it has been our privilege to hear. Of this he took full advantage. Indeed, the gusto with which he treated the entire subject would have done credit to Goering himself.

And now we must conclude with a correction. Mr. MacLean's name is MacLean and not McClean. Our error in this respect last time, has, we understand, caused Mr. MacLean more pain than even the outraged comments of certain of our local readers who had taken our words literally, and sincerely believed that forty-eight Spencer Wells were inadequate for his haemostatic technique.

" Its really a bit too much," said several of these simple folk. And if they were referring to their own gullibility we are bound to agree with them.

Such then, is our simple chronicle. In a fortnight's time we hope to have more news for you. But not too much more, if your understand us.

D. S. C.

Orpington Letter

WE can tell you but little of Orpington. On Saturday, September 9th, having been summoned to that earthly paradise by telegram we set out with our blue suit, gas mask and stethoscope. We picked up two other house officers, lost our way in Kentish surburbia, and then suddenly found ourselves by a gap in an Orpington road. We entered the gap and thought we were at journey's end. But, no. In front of us stared a notice in red pencil. " It was regretted that house officers had been summoned ; the Hospital was not yet ready for them. Would they kindly return home ! " Somewhat abashed we decided to make an inspection of our future abode. We found Professor Johnston, Dr. Hampson and their staffs in a not very handsome link building. They were sympathetic, but the Ministry of Health was bothering them. We found row upon row of single storied wooden huts, very pervious to shell fragments, we thought. Some appeared to be wards, some staff quarters. We found iron sheds, sandbags, strange wooden stairs and passage ways, some hard courts, several buildings rising from the ground, and a few Guy's nurses sun-bathing on a lawn the worse for the summer. Apparently about 30 Guy's nurses and a few students were then there. We left our addresses and returned at first sadly, then gladly home. For it meant an extension of our holiday.

Since then we have been on holiday. We await daily our telegrams summoning us to Orpington, but it does not come. Our holiday continues.

A few facts have come our way. The Ministry of Health is apparently keeping Professor Johnston's staff busy. Mr. Bromley has been seeing to the equipment of operating theatres. Building activity is proceeding apace. Our billets are already arranged. But more we cannot tell you except that we are greatly enjoying our holiday and have reduced our golf handicap from 40 to 38.

E. B. R.

Dartford Letter

SINCE our last letter little has occurred to ruffle the tranquility of our rustic existence. This is probably the last time we shall be able to say so as two hundred " chronics " are being re-evacuated from the Midlands to fill some of the Orchard Hospital beds. Joyce Green is to have some fifty or sixty acute cases.

Three medical officers are wilting somewhat at the thought of facing the rigours of Winter in the

Orchards' wooden huts, after a month of the Joyce Green flesh-pots.

Last week's agricultural activity consisted of picking pears and pulling mangel-wurzels. The latter can be recommended to anyone with time to spare and a pair of gloves to ruin as a congenial occupation.

Filled with dismay at the sight of so many young women left to their own (de)vices, several senior members of the Nursing Staff gathered together representatives from Staff, Students and all sections of the Nurses, with the purpose of organising "good, clean fun" for all!

Following the formation of Sub-Committees to deal with every aspect of social activity—sporting and dramatic, literary and debating, arty and crafty, etc.—things began moving rapidly. Dramatic ardour was rather moistened by an edict, that on no account could the sexes mix to such an intimate extent as to allow rehearsals to occur. However a dance was arranged, and although compelled to finish prematurely—owing to a little irritability in high places—it lasted long enough to drive a physician to drink and a houseman to hang his suit out of the window overnight, whence the fumes of "Californian Poppy" caused the local Air Raid Warden to sound his rattle.

Towards the end, a pleihora of "Excuse me!" dances completely bewildered the small handful of males, on account of the rate at which so choice an assortment passed through their hands.

The heavy drain upon constitutional reserves caused by this unwonted exercise, and the necessary resuscitation measures taken, were indicated all too plainly by the fact that the little wooden eye of Nemesis was bloodshot as it brooded over the breakfast-table.

Once more, as you see, we have no real news of medical or surgical interest, but will remedy that next time, when we have seen the patients for which we have waited so long.

Rumour still stalks among us and speculation is still rife on two major issues—air raids and salaries! Some say neither are likely to come our way, others expect both. Meanwhile the shadow of the Budget hangs like a pall over the mess room. Nevertheless our mental and physical health remains rubust, at times even exuberant. May we wish you the best of the fortunes of war.

J.S.C.

Correspondence

Guy's Hospital Reports

To the Editor of the GAZETTE

SIR,—It is almost certain that the publication of the Guy's Hospital Reports will soon have to be suspended owing to the war, but the editors are anxious to complete and publish at least one more number for this year, and if possible two more.

The next number, the third for 1939, is the last one which will be published under the editorship of Sir Arthur Hurst. I need scarcely remind Guy's men of the long and splendid editorship which now comes to a close. I feel it therefore doubly important that the next number should be completed without delay. It will only be possible to publish this volume if ample support is given and I hope that many of those who are now relatively idle may be able to help us by completing and submitting articles for publication.

Yours sincerely,

R. C. BROCK.

The Editor,
Guy's Hospital Gazette,
Guy's Hospital,
London, S.E.1.

The Dental School

To the Editor of the GAZETTE

SIR,—It is proposed to re-open the Guy's Hospital Dental School on November 1st, at a large Clinic 1½ miles distant from Tunbridge Wells. Provision is being made for students in all stages of their course including pre-medical studies.

The Clinic is situated in the neighbourhood of the base Hospital of the Guy's Sector. There will be a subsidiary Clinic in which Conservative work, extractions and prosthetic work will be carried out actually in Tunbridge Wells.

Accommodation will be provide in the School for some of the students at a cost of 50/- per week for Board and Lodging.

Further particulars may be obtained from The Sub-Dean, Guy's Hospital Dental School, London Bridge, S.E.1.

Yours faithfully,

F. BOCQUET BULL,
Sub-Dean.

The Clubs' Union

To the Editor of the GAZETTE

SIR,—An emergency meeting of the Clubs' Union Council was held on Friday, 29th September to consider the various problems which have arisen owing to the outbreak of War.

At the moment it has been impossible to make complete plans for the future, but agreement has been reached on the following matters :—

1. *Subscriptions to the Clubs' Union.*

Owing to the distribution of Guy's students in the various hospitals of the Sector, all subscriptions will be cancelled from 1st October, 1939.

2. *Use of the College.*

The Reading Room, Dining Room, and "Spit" which belong to the Students' Club will be closed within the next few weeks, unless it is found possible for the Hospital or some other body to take them over. If this latter step is found impracticable, every effort will be made to provide temporary accomodation for those students stationed at Guy's.

3. *The Ground at Honor Oak Park.*

The Pavilion, first Rugger and the Soccer pitches, and the Tennis Courts will be kept open. It may be found necessary at a later date to make a small individual charge to those using the ground.

4. *Subscription to the Gazette.*

The staff and students subscriptions to the *Gazette* which in the past have been paid by the Clubs' Union are suspended from now onwards. Arrangements for some form of individual payment in the future are being considered.

5. *The building of the Squash Courts & Gymnasium.*

It is probable that work will have to be stopped after the roof has been finished, and therefore this building will not be available.

Yours, etc.,
I. G. ROBIN,
C. S. DARKE,
for the Clubs' Union Council.

Sport

Rugby

EMERGENCY FIXTURES—1st XV.

Saturday Matches.

Sept. 30. Catford Bridge at Honor Oak Park.
Oct. 7. Old Tiffinians at Honor Oak Park.
„ 14. Kings College Hospital at Honor Oak Park.
„ 21. St. Bartholomew's Hospital at Honor Oak Park.
„ 28. Harlequins at Honor Oak Park.
Nov. 4. Metropolitan Police at Hendon.
„ 11. Rosslyn Park at Old Deer Park.
„ 18. "An Army XV" at Honor Oak Park.
„ 25. Welsh Exiles at Honor Oak Park.

Additional fixtures will be announced in due course. Efforts are being made to arrange fixtures for a 2nd XV, and already games have been arranged with Lloyds Bank, Harlequins 2nd XV, and Rosslyn Park 2nd XV.

Guy's v. Catford Bridge

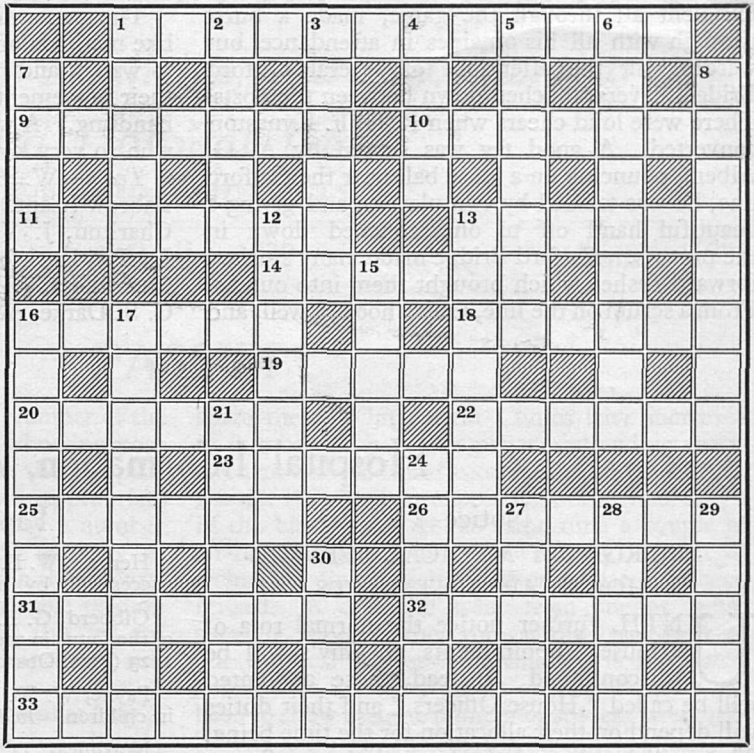
THE Hospital opened the season against Catford Bridge on Saturday, September 30th, at Honor Oak Park. A most interesting and enjoyable game ended in a win for Guy's by one goal and five tries (20 points) to three tries (9 points). There was a large crowd present, including a fair number in the uniform of the various services, which was proof that the efforts of the hospital in arranging 1st XV. fixtures will be much appreciated by the public as well as the players. On the touch line for Catford Bridge was Mr. H. H. Smith, well known as a referee, in the uniform of the A.F.S. Guy's turned out a strong side for this first game, including L. Babrow, this year's Captain, A. G. Albers, playing his first game for the Hospital, with the experiment of P. C. Gartrell and D. W. F. Charlton on the wings. The game proved that the Guy's back division will be a great combination, as many of their movements from wing to wing, with a sudden cut through in the centre definitely indicated "class." Guy's started the game against the wind, and were soon defending, only to recover, to give a delightful three-quarter movement which broke down. Catford Bridge relied on forward rushes, with an occasional three-quarter burst. Catford were the first to score through Thomas, then followed a three-quarter movement by Guy's resulting in P. C. Gartrell taking a quick pass to dive over near the corner. P. C. Gartrell was again placed in possession and although hampered managed to touch down with ease. Then followed another try by Thomas for Catford Bridge. Towards the end of the first half a scramble on the Catford Bridge line near the corner flag showed that T. Renton had scored for Guy's. As none of these tries were converted Guy's led at the interval by 9 points to 6.

On resuming Catford Bridge had a fair share of the ball from the set scrums, but their threes could make little headway against good covering and resolute tackling. Following one of Guy's many three-quarter movements, D. W. F. Charlton had bad luck in being forced into touch, when he

(*continued on page* 324)

Crossword No. 6

By "Pepsin"



ACROSS

1. Medicine is for the sick. (2 words, 6 and 6.)
9. Dental Mixture.
10. Happy sight, so give a wink. (2 words, 4 and 3.)
11. Reliant. (Anag.)
13. Let through in the beginning.
14. Sick-room receptacle.
16. Barnum's way out.
18. Chemist's pound.
19. — Ammonis is the hippocampus major.
20. Withdraw from circulation.
22. Unprofessional.
23. Trembling like a fish.
25. Sleeps like a bird.
26. Worm resembles motor.
31. Disease once associated with miasma.
32. Having food and drink leads to greed.
33. Complaint of a celebrated sailorman?

DOWN

1. Organ within an organ.
2. Gas.
3. No doubt, where phrenologists place bump of religion.
4. Stomach fold.
5. Asymmetric muscle.
6. Describes painful ailment starting as a cold in the head and ending in a habit.
7. Reasonable characteristic of sufferer from gall-stones.
8. Taken while watching England play Australia?
12. Full of matter.
13. Leaps up. (Anag.)
15. Covering coloured up to a degree
16. Found with mouth-organs in nose-bands?
17. Tneb.
21. Not a full-time sailor in reverse. It's a catch!
24. Sandwich islander.
27. Old-time 1 ac.
28. Restrains the kidneys.
29. Solid fat.
30. Throw in the eye.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 17th October.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 5: Alan M. Edwards,
St. Stephens Hospital,
Fulham Road, London.

SOLUTION No. 5

Notes

ACROSS

16. Anag. of 'O the rats'
26. Come do.
27. A.D. verse.

DOWN

7. Anag. of 'in that Polish map.'
22. B.A.+sic.
24. Anag. of KIDS.

SOLUTION No. 5

▒	T	A	N	G	E	N	T	▒	H	E	R	P	E	S
S	▒	N	▒	R	▒	A	▒	B	▒	T	▒	A	▒	A
A	L	I	M	E	N	T	A	R	Y	C	A	N	A	L
W	▒	M	▒	E	▒	R	▒	E	▒	H	▒	O	▒	T
B	R	A	I	N	W	A	V	E	S	▒	S	P	A	S
O	▒	L	▒	S	▒	T	▒	C	▒	C	▒	H	▒	▒
N	E	M	P	T	▒	▒	R	H	E	O	S	T	A	T
E	▒	A	▒	I	▒	F	▒	▒	▒	N	▒	H	▒	I
S	A	G	A	C	I	O	U	S	▒	G	L	A	N	D
▒	▒	N	▒	K	▒	R	▒	T	▒	R	▒	L	▒	D
B	R	E	D	▒	E	C	T	O	D	E	R	M	A	L
A	▒	T	▒	S	▒	I	▒	P	▒	G	▒	I	▒	E
S	T	I	C	K	I	N	G	P	L	A	S	T	E	R
I	▒	S	▒	I	▒	G	▒	E	▒	T	▒	I	▒	S
C	O	M	E	D	O	▒	A	D	V	E	R	S	E	▒

was going full speed for the line. However, Guy's soon went ahead with a try by P. C. Gartrell. J. Van A. Steytler, whose touch kicking was excellent all through the game, made a burst through with all his outsides in attendance, but warding off the attentions of several Catford Bridge players, touched down between the posts. There were loud cheers when R. U. F. Kynaston converted. A good try was scored by A. G. Albers, pouncing on a loose ball near the Catford line, he was tackled by two players, and giving a beautiful hand off to one, touched down in the process. Catford Bridge made many spirited forward rushes which brought them into our 25. From a scrum on the line, Guy's hooked well, and got the ball back, but Herbert, watching the ball closely stole a march on everybody and touched down for an unconverted try for Catford Bridge.

The game was full of interest, but the business-like methods of all Guy's outsides were a delight to watch, and it must be ages since they worked their movements with such excellent passing and handling. A word of thanks to Mr. J. N. Dollar, who so very kindly came along to referee.

Team—W. B. Sanders, P. C. Gartrell, L. Babrow (Capt.), R. U. F. Kynaston, D. W. F. Charlton, J. Van A Steytler, C. Halamandres, J. P. Rochford, H. F. Osmond, A. S. Carruthers, J. R. D. Williams, J. C. Bulstrode, C. S. Darke, A. G. Albers, T. W. Renton.

Hospital Information, etc.

Notice

EMERGENCY MEDICAL SERVICE HOUSE APPOINTMENTS

UNTIL further notice the normal rota of House Appointments at Guy's will be discontinued. Instead, those appointed will be called " House Officers " and their duties will depend on their allocation for the time being. They will be allotted to Hospitals in the Sector which have been staffed from Guy's.

Vacancies will be announced from time to time as they occur, and those anxious to apply should send in their names to the Acting Secretary of the Medical Committee, Dr. L. Forman, County Hospital, Farnborough, Kent.

Candidates who do not succeed in obtaining an appointment at one of the Hospitals at present staffed by Guy's will be offered an appointment at one of the other Hospitals in the Sector.

As it has been decided that all newly-qualified men must do a House Appointment for at least three, and in most cases for six months, before being released for service with the Forces, all men should, on qualification, send in their names to Dr. Forman.

At the present time, House Appointments under the Emergency Medical Service carry with them a salary of £350 per annum plus board and lodging, but this salary may be subject to alteration. Each House Officer appointed will be paid the salary in force at the date of his appointment.

T. B. JOHNSTON,
Group Officer,
Sector 10.

Papers by Guy's Men

Herbert, W. E. A case of periapical infection treated successfully by ionic medication. *Ibid.*, 243.

Gibberd, G. F. The factors influencing the attitude of the fœtus in utero. *Proc. Roy. Soc. Med.*, 1939, xxxii, 1223 (Sect. Obst. Gyn.).

Payne, W. W. The plasma phosphatase in jaundice in children. *Ibid.*, 1265 (Sect. Therapeut. Pharmacol.).

Northfield, D. W. C. Subdural hæmatoma. *Ibid.*, 1200 (Sect. Study Dis. Childr.).

Maizels, Montague. A new filter for blood-transfusion. *Lancet*, 1939, ii, 597.

Traill, R. R. Pulmonary tuberculosis and syphilis. *Brit. J. Ven. Dis.*, 1939, xv, 171.

Todd, Alan H. Ætiology and treatment of spasmodic flat foot. *Brit. Med. J.*, 1939, ii, 602.

Payne, W. W. The treatment of diabetes in children. *Med. Pr.*, 1939, ccii, 250.

Layton, T. B. Treatment of inoperable abdominal wounds. *Lancet*, 1939, ii, 661.

Stamm, T. T. Ætiology and treatment of osteo-arthritis. *Lancet*, 1939, ii, 754.

Marriages

PARROTT—REDFERN.—On Saturday, 2nd September, 1939, at the Friends' Meeting House, Sidcot, Somerset, Arthur Edwin Parrott to Cecily Redfern.

CHRISTIAN — SCHREIBER. — On Thursday, 7th September, 1939, at the Chelsea Registry Office, Harold Christian, L.D.S.Eng., to Nancy Schreiber.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *21st October* 1939 — *Number* 1337

PASSIM

INSTEAD of the usual Special Number of the *Gazette* published at this time, whose purpose is to welcome new students to the Hospital and which is therefore thoroughly inappropriate because of the war, we publish to-day a number devoted to reviews. We have the temerity to believe that they may be interesting in themselves, and also be useful as a guide to valuable reading both for students and doctors. Of this we are convinced: that reading is more important, not less, in war-time.

Another bombless fortnight has passed at Guy's, and as a result there have been further changes in the direction of the normal running of the Hospital. The number of in-patients has risen to 130, and there are now six House-Officers who share them. Out-Patient Clinics have increased in number, as have the patients attending them. Even an embryo transfusion service has re-started, though it is hard to expect donors to find Guy's in the black-out. At the same time a couple of air-raid rehearsals have shown up a number of technical points which might otherwise have been missed. A dramatic scene from one of them, showing, among other things, the back view of our Surgical Officer-Commanding, is illustrated here. One important result of the rehearsals has been to show that the number of student stretcher-bearers and trolley-pushers is already dangerously inadequate, so that we view a recent rumour, that many students are soon to be informed that their services are no longer required by the Emergency Medical Service, with anxiety. Not, indeed, that we expect the students concerned to agree. The students here, and no doubt elsewhere in the sector, have been living a hard life since the war began. We congratulate them for the spirit in which they have adapted themselves to it, especially those who have also passed an examination.

Dress Rehearsal

* * *

The most famous event, of course, of the fortnight, was the reception by all the House-Officers in the sector of an obscure, but recognisably offensive, letter from the Ministry of Health.

On September 11th all the House-Officers here received a letter from Whitehall which contained the follow-

ing sentence :—*If you enrol for service under the above-mentioned conditions you will, when called on for whole-time service, be employed as a Medical Officer, in the first instance at Guy's Hospital. Your salary will be at the rate of £350 per annum, with an allowance of £100 if not supplied with board and lodging.* This document was headed : *3 months contract.* The House-Officers signed the enclosed letter of enrolment, the more cautious adding to their signature the observation that they had been engaged on whole-time service at Guy's since September 1st. We have heard of a still more cautious medical man who showed the letter to his lawyer. " Only a doctor would sign a thing like that," he said.

We worked on, nor need we pretend that in the circumstances our labours were particularly heavy. We were the more heartened when, at various times during the ensuing three weeks, some of us received cheques. These, admittedly, did not amount to a month's pay, and it was impossible to discover on what system some were chosen and the others left. Nevertheless we felt that our early suspicions might have been unjustified.

Then, on Saturday, October 6th, the blow fell. All the House-Officers and, curiously, two anæsthetists belonging to a higher salary-level who had therefore a longer contract, received the following letter :—

Dear Sir,

The letter forwarded to you inviting you to enrol in the Emergency Medical Service was sent to you in error as it was not appreciated that you were under contract to a Hospital. These contracts cannot be interfered with by the Emergency Medical Service.

The Error is regretted and the letter of enrolment therefore must be considered as withdrawn.

This letter was signed *Yours faithfully*. Indeed, one would suspect its author of many qualities before *faithfulness* occurred to one.

Since then, as has been reported in the daily Press, explanations and excuses have been made, and it now appears that the letter constituted a curiously clumsy attempt on the part of the E.M.S. to rid itself of responsibility towards those whom it had enrolled for more than three months. Why then, one wonders, was it sent to people who, with two exceptions, had been enrolled only for three months in the first place ?

Everyone agrees that newly-qualified men should have at least three months' training in the wards before joining the armed forces, and that consequently the individual House-Officer's turn of duty must be short. Most people agree that the lower rates of pay in the E.M.S. are unjustifiably high. In war-time, all are ready to recognise that large organisations, erected during peace to deal with a hypothetical emergency, may require drastic alterations which cannot be made without the appearance of injustice to the individual. This letter, therefore, for all its fascinating mixture of insolence with incompetence, must not be allowed to interfere with the sense of duty of those to whom it was addressed. It should rather be preserved carefully as an object-lesson of what quite ordinary people (even oneself) can do, when hurried, overworked and sorely harassed by conflicting experts.

* * *

On the evening of Friday, 13th, those who were languishing on duty at the Front Surgery were shocked to year by telephone that Joe Whitbread the Hospital's head porter, was lying in an alleyway near the Hospital, where he was thought to have broken a leg.

An ambulance was immediately rung for, and at the same time a party of students set off on foot with a stretcher (there is no lack of these in the Hospital nowadays). The two parties converged on the victim, and all returned in the ambulance to the Surgery, where it was found that Whitbread's clothes were soaked, he having lain for an hour in heavy rain (and in the black-out) before he could get help. Clinically, a simple fracture of the tibia was evident, and since he was in quite good shape in spite of his very nasty experience, the diagnosis could be confirmed at once by X-ray. He is now quite recovered, lying in Bright with his leg in plaster, but it will be some time before we see that cockaded top-hat and those magnificent moustaches again at the Front Lodge.

▭

LIGHT literature is needed for those students now quartered at Pembury, especially those attached to the Medical School. Many readers of the *Gazette* must have books upon their shelves which once gave them pleasure, though they are unlikely to read them again. Will you send a parcel, marked " Guy's Students," to 6, Sandrock Road, Tunbridge Wells, Kent ?

▭

WE apologise for the absence this week of a letter from Dartford. Though we have not recently heard from our correspondent there, we believe his silence to be due less to the absence of news in that quarter than to his unwillingness to impart it.

* * *

Without comment.

" Dr. Elliott replied . . . that with regard to medical students, he understood that in general they were most willing to assist in the treatment of casualties. He could not believe that they wished to profit by the circumstances of war."

—*B.M.J., Sept. 23rd.*

As we go to press, we learn with great distress of the sudden death of Dr. Poulton, Senior Physician to the Hospital. Dr. Poulton has been, since the war began, stationed at Pembury as Physician to the Emergency Medical Service.

A full appreciation will appear in the next *Gazette*.

THE new system whereby readers can obtain the *Gazette* has not yet been finally worked out.

This we can say now; that all Guy's students and nurses, at the Hospital or Sector Hospitals, can obtain the *Gazette* at a **Special War-Time rate of 5/- per annum** payable in advance. To do this, they should apply to the Gazette Office, Guy's Hospital.

Obituary

MR. JOHN POLLARD

MANY old friends will learn with regret of the death of John Pollard, which occurred suddenly on September 26th at his home in Cheltenham.

The son of an old Guy's man who was contemporary with the late Mr. Jacobson, he entered Guy's in 1898, and qualified in 1904. After doing a house appointment at Moorfields Eye Hospital, he entered the Colonial Service and commenced his long and happy career in Nigeria.

While on leave in 1910, he took the M.D. (Lond.) in Tropical Medicine, and in 1912 the D.P.H. (Eng.).

No one could have enjoyed his career in West Africa more than he did, and in every station he made hosts of friends; at the time of his retirement from the Service he had attained the rank of Assistant Director of Medical Service.

During the last war, he served with a combined French and British force in the Cameroons, for which he was awarded the Croix de Guerre.

He took up practice in Cheltenham ten years ago. During the last few months his health had given cause for anxiety, but he remained in harness until a few days before he died.

Endowed with a happy disposition, generous and loyal, he made many friends wherever he went, and his passing will leave a sad gap.

His life was inspired by a firm religious belief, which shone through all his actions and enabled him to face the inevitable end of his last illness with a steady and unflinching courage.

To his wife and children we offer our deep sympathy.

A. L.

The Psychology of Nazism

By W. Lindesay Neustatter, B.Sc., M.B., M.R.C.P., Physician in charge of Psychiatry for Sector X.

"MEIN Kampf" is an undoubtedly able exposition of applied psychology, containing far more knowledge of human nature than the majority of academic works on the subject. The *Saturday Evening Post* recently very appropriately labelled it "Blue Print to Hell," and as a Bradshaw to man's worse nature it certainly is a masterly guide.

For Hitlerism is a doctrine which rewards and praises men for behaving in a manner which it is the aim of civilisation to suppress—for example the praise which Hitler showered on the participants in last year's progrom. That is the most fundamental danger of such a movement.

If one were to seek a formula to express the purpose of Nazi Psychology it would be that its object is to "canalise hate." This might be argued of all revolutionary movements, but there is a difference. For instance in the case of the French revolution the hatred was spontaneous, it was the hatred of the miserable and hungry underdog, driven to a state of desperation where he was prepared to fight for his rights. Nazism undoubtedly also canalised the grievances of many of those who were suffering from economic stress. But the difference is that Nazism was not concerned in helping the underdog—Hitler states he despises the masses of workers—it was merely making use of this discontent to furnish its own ends. In the same way it seized upon the anti-semitism which existed to canalise hatred against the Jews, again merely for its own political ends, and partly to satisfy Hitler's own paranoid tendencies, not because suppressing the Jews served any constructive end.

The most fundamental psychological problem then, is to account for the amount of hatred which occurs in human beings. The psychoanalysts lay much stress on early development. They assume that the infant has markedly aggressive

trends. During the course of development and upbringing the child is frequently thwarted, not only by disciplinary measures, but in infancy it is thwarted in emotional gratifications, it cannot always have its mother, it cannot always have the breast when it wishes, etc. Such obstructions to its pleasures arouses aggressive tendencies, and in this way a pattern of a " reaction of hatred " may be formed, which later serves as a " jumping off ground," as it were, for further antagonisms. Similarly, the Œdipus complex, the rivalry of the child with the parent of its own sex, may determine later hatreds.

This may be so, the question requires further investigation, I think it probably plays a larger role in the development of neuroses and sadism than in overt behaviour. Anyway it is hard to see what can be done about it. On the other hand, the way childhood is managed will determine later reactions. Where a child is unkindly treated, or deprived of affection, where it is crippled, or in other ways handicapped, it will tend to grow up with much latent hatred and bitterness in its make-up.

But there are more paradoxical factors. A child may be quite kindly treated, and yet suffer from an excess of discipline. In education, as in physics, action and reaction tend to be equal, and the overdisciplined child may turn out a rebel, though he is more likely to turn out a " left revolutionary " who wants to overthrow authority, than a " right revolutionary " who wants to stamp out subservance. At the other extreme, the child which, to use a fashionable psychological term is " overprotected," may easily turn into a Nazi, when he finally breaks free. For he must at all costs show that he is not soft or efeminate, and must show the world he is a real man by a show of aggression and brutality, which, in Nazi philosophy is the not very flattering concept of masculinity. Throughout Hitler's personal psychology the invariable necessity of affirming " He man " qualities is almost certainly a protest against his own inherent feminity, he must repeatedly demonstrate he is not a feminine weakling. The apparent lack of any kind of sexual activity on his part would be in keeping with this.

Because of the " masculine protest " which may result from attempting to suppress outlets in children, the question of the best prophylaxis against producing such aggressive tendencies in adults arises. Certainly teaching pacifism to children may, by making normal outlets for aggression impossible have just there verse effect. Lindbergh, who appears to have shown leanings towards fascism, is the son of a congressman who was strongly pacifist. The solution probably lies along the lines of allowing as much outlet as possible for aggression in children, while making it clear that the necessity for the continuous show of force is not a sign of strength but weakness.

However, to return to the causes of hatred and discontent, these qualities will develop further in many adults, simply because their lives are unsatisfactory. Some of the causes of this are in the nature of things inevitable. With rare exceptions, the woman who remains a spinster, who has never been attractive, cannot ever at heart really be happy and content. It was noteworthy in the last war, when the salutary effect of the possibility of being bombed at home was non-existent—how bloodthirsty they were. The other great cause of discontent is, of course, poor economic conditions, especially unemployment. When economic conditions improved in 1930 in Germany the Nazi party almost ceased to exist. All these factors operating together prepare the individuals psychology for fascism.

There is, however, one other very subtle and important psychological factor at work in the case of the " right revolution " as compared to that of the left. The former type of revolutionary can have all the emotional satisfaction of expressing his discontent, without having to go contrary to the accepted conventional principles he has been brought up to believe. The left revolutionary is challenging authority and the conventional outlook, and he arouses all the antagonism which every heretic arouses even if he only declares the world is round and not flat. The right revolutionary on the other hand comes in on the side of authority, he uses the strong right arm to suppress whatever new type of idea is springing into existence. Hence he has authority on his side, and if he is really wise as he is in Germany, he finds vent for his desire for aggression and an outlet for his hatred on some party sufficiently weak not to be able to defend itself. In this way the followers have the multiple satisfaction of the undoubted pleasure in excersising force, while at the same time being able to do so in perfect safety, and above all, instead of being reproved for releasing his sadistic instincts, authority approves it. There, as stated at the commencement lies the greatest danger of the demoralisation from such a movement.

In a short space it is not possible to enlarge on any except the fundamental motives. But the whole movement exemplifies the broad problems stressed by the psycho-analytic school, namely the interplay of forces from infancy onward of man's primitive impulses *versus* the inhibitions which civilisation attempts to impose. Obviously

it is far easier to play on the former, than the latter. In fact it is noteworthy that even under the guise of the gentlest of causes such as Christianity, the crusaders, the inquisition, etc., satisfied their aggressive and sadistic instincts by spreading the doctrine of brotherly love with the sword.

While stressing how the Nazi movement overtly appeals to the bully, the fact must not be lost sight of, that there are also plenty of slogans included which appeal to idealistic qualities of a kind. In its nationalism the movement is appealing to qualities which until recently were, and still are by many considered very desirable, and in the post war confusion many young people were caught up in the Nazi movement with perfectly idealistic motives. The objection to the movement lies in the fact that this idealism has been enlisted, just as the sadism has, to further the ambitions of the rulers. People speak of what Hitler has done for the Germans ; what he has done is to lead millions of them to slaughter.

The psychology of the rulers is a different matter from that of the people, the former are the players, the latter the orchestral instruments. Again the psychology of Hitler must be differentiated from that of his immediate associates. The latter are hard-boiled business men, who had the foresight to back the coming horse early on. They are probably quite unconcerned with the ideology of the " Nazi Revolution," indeed their aims are exactly the same as those of imperialist Germany always have been. Hitler is in a different category—probably. Probably because one of the most interesting problems about him, is he is a fanatic who has lucid moments, or is he a calculating and cunning individual who is a play actor and thus gives an impression of sincerity ? For instance, have his previous penorations against communism lasting for hours deceived himself as well as others ? It is hard to say. But from all accounts he is extremely emotional and unstable, and such individuals can be almost dual personalities. His capacity for becoming emotional when using the most trivial metaphors is exemplified by a speech made long before he came into power. Referring to vacilating politicians he said " They are like passengers who get on to a train, walk along the corridor and get out. When *I* set on a train "—his voice reaching a crescendo " I *never* get out."

It can be quite confidently said that Hitler is a psychopath—unlike Mussolini and Stalin who appear to have perfectly sound personalities. Psychopaths are individuals who suffer from extremely powerful impulses, which they are unable to inhibit, and which completely dominate them. They also often have the marked paranoid tendencies shown by Hitler. They are not insane, nor as far as one can see, is it more than abuse, to call Hitler insane, at least in the accepted sense of being certifiable. Every psychiatrist can listen to Hitler, and his train of thought, though diffuse, is not disjointed. But a paranoid streak runs through them. There is a recurrent *motif* common to all his speeches, he always needs to set up someone or something which is persecuting Germany and then show how he will overthrow it. How far this is unconscious, or how far a conscious knowledge of what is required is hard to say. It is probably intuitive. Interestingly a study of Charlie Chaplin films, in which the latter repeatedly overcomes both the big bully and the enormous policeman, will show the same theme, and in both cases the inferiority complex of the audience is satisfied. So both the little men with Charlie Chaplin moustache use the same psychology to enlist the sympathies of their audiences, one to bring happiness to millions, the other to send millions to war.

News from the Base

Pembury Letter

THROUGH the agency of Tom-Tom, Bush Telegraph and Express Jungle runner, we submit you our fortnightly report from darkest Kent. We are now of the country, and though we remember our urban habitations, we have no great yearnings to return thereto.

Of the senior staff, Mr. Hughes and Mr. Turner are unchanged by environment or time, and to many Guy's men this will be gratifying news.

Dr. Ellis should by now be near or in Rumania whence he has gone to report on Polish refugees. We wish him well on his arduous journey, and trust that on his return he will be able to add to his " Order of the Red Sheepskin," awarded for services in Spain, the " New Order of Mitteleuropa " (ribbon red and brown ; medal, Swastika obverse, Hammer and Sickle reverse, engraved on edge " Gott straf Poland ").

Prof. Nicholson is still a delightful host entrenched at " The Camden." He has been heard to remark, " I'm ruining my liver."

Yours truly, who in pre-war days had forty people on the firm and only ten on any round, now finds the position reversed. Lack of good material in the Children's Hospital does not help matters.

In the Residents' Flat Wakeham has unfortunately gone off sick, but Bell has come done in his place. We understand that Cupid too may take a hand in arranging our personnel, and it is rumoured that " He " may come to us from Guy's because " She " is stationed at Pembury. Can it be that romance touches even those sterner hearts at Orpington ?

The students have done much to enhance our reputation locally, and their conduct has been exemplary. Even the results of the recent examinations were celebrated with unaccustomed caution. We believe a certain amount of anxiety is felt by some students regarding their future movements. In the uncertainty which prevails rumour flourishes. Those concerned are hoping for some statement from official circles.

Socially we have achieved two dances and a concert given by the Pembury nurses. All these functions were highly successful.

Now ends " This strange eventful story." To all Guy's men we send felicitations, and to the financial department of the Ministry of Health this special message :—

" DARE QUAM ACCIPERE."

N. M. J.

Farnborough Letter

SO far, this has been quite an eventful fortnight. Although no more engagements or marriages have carried off any of our little garrison, we have been depleted in other ways. Mr. Massie remains confined to his bed with a thrombosis in his arm ; he has our sincere sympathy. So, too, has his house surgeon, Mr. C. Kersley Cole, who last week developed bronchitis and had to be invalided home.

This left our band of minstrels and mimes without an orchestra for their prospected show. True, there were other skilled pianists available, some of whom nobly came forward. But a number of items prepared by the Residents had to be postponed until the day when Mr. Cole's remarkable ability to accompany their songs, in such a way as to suggest to the audience that the singers also knew the tune, could again be at their disposal.

None the less the entertainment was put on. Despite the short notice at which it was produced, it contained a number of excellent performances. For the next one a rather larger cast and several ambitious melodramas are promised.

Two more housemen who have disappeared from our midst are Messrs. Cyril Cormac and John Hinde. Mr. Cormac has left us for a study of Public Health in the Midlands, while the destination of Mr. Hinde is subject to the strictest censorship since his aim is to join the R.A.M.C., some of whose members are rumoured to be abroad somewhere. This drain upon our manpower has left Dr. Leeming with a great amount of work to do, as he is at present the only general House-Physician among the Guy's staff. We know about all this because Dr. Leeming has told us himself.

To a lesser extent we all have more work to do. A day or two ago a convoy of thirty-one patients arrived from Lewisham Hospital, some surgical, some medical, and were distributed with such impartiality that Mr. Stamm's firm received a case of flexural eczema. It will be interesting to learn the orthopædic views on this condition. The suggestion that Mr. Stamm and his house-surgeon are considering arthrodesing all the joints whose flexor aspects are affected, to splint the inflamed surfaces and abolish once and for all the flexor crease, has received no confirmation.

The circular letter of retrospective dismissal, so to speak, from the Ministry of Health, came as an unsavoury surprise to all the house officers here. Overdrafts which had lain all uncomplaining at the back of our minds leapt suddenly to the fore. All were agreed that the letter itself was more worthy of the head of the German Government than of some relatively obscure official in our own. Immediate consultation with out Sector Officer did much to allay our fears. He would not see us starve, of that we could be certain. And no doubt by this time these words appear in print recognition both financial and bureaucratic will have been accorded our services. Meanwhile we suppose we should be patient and count our blessings. After all, none of us who ventured to wear E.M.S. armlets have as yet been sent to prison for masquerading wrongfully as servants of His Majesty.

The other day we again challenged the R.A.F. at rugger. Again they were victorious, but this time by only six points, two tries, to nothing. All our men returned safely, and should the opportunity arise again, we fully intend to play them yet a third time. *Vive le Sport* !

So we continue. Guy's dispersed is not Guy's dissolved, which is one great encouragement. And that such tension as originally existed here between the two staffs is now smoothed away is surely another. We remain buoyant, as we said last time.

D. S. C.

Orpington Letter

FOR those fortunate enough never to have visited Orpington here is a description of this suburb with nearly every modern convenience. Imagine five tree-lined main roads joining each other. Imagine side roads, also

tree-lined, branching off each of these main roads. Imagine suburban villas great and small with gardens and garages flanking all these roads, interrupted occasionally by a field, or a house agency, or a waterworks. Come with me to " the village," the euphemistically named centre of Orpington life. Here, along a single street, are shops (Boot's, Timothy White's, Woolworths, etc., last suburban variety), a cinema, and a branch of the Kent County Library. Besides " the village," Orpington possesses an imposing railway station, a town hall, a pub, a Catholic Orphanage, and an infirmary. Look out on the roads at 8.30 a.m. or 6 p.m. They are black with city workers hurrying to their offices or to their homes. For an hour or so Orpington is alive. Through all other times it sleeps peacefully in its almost country air.

Orpington Hospital (alias Infirmary) has had a varied history. Built in the last war, it accommodated Canadian wounded. After that war the R.A.F. acquired it, and after the R.A.F. the K.C.C. (Kent County Council). The K.C.C. turned it into an infirmary, and now the Ministry of Health and the K.C.C. between them are turning it into a base hospital. Imagine a series of hen-houses magnified twenty times or a shack village in the Wild West—those are the nearest equivalents to Orpington Hospital, graded, for it consists of about fifty single-storeyed asbestos huts, spread out over a meadow. There is a central brick boiler-house and a peripheral brick mansion (oh, luxury)—Boundary House—in which Professor Johnson and his staff have their abode. It is rumoured that certain members of the Orpington medical staff are plotting to abduct Professor Johnson and occupy Boundary House themselves.

It is pointed out also that the Ministry of Health and the K.C.C. are *turning* these hutments into a base hospital. Three weeks ago Dr. Campbell was appointed medical superintendent, and since then he has been battling manfully with this change. The problems he has to tackle are enormous. Here at the moment are housed over 700 old and infirm patients, and seventeen patients evacuated from Lewisham Hospital. This is the headquarters of the Massage Department. There is a temporary theatre—one of the inevitable huts—surmounted by a complicated wooden superstructure supporting sandbags. The theatre equipment is so incomplete that a patient requiring drainage of his empyema could not be treated. To add insult to inadequacy the sandbags in the heavy rain caused their wooden supports to sink and poured their soaked-up waters through into the theatre, plaster room, anæsthetic room and X-ray room, causing oaths and destruction. There are no medical quarters in the hospital, not even a mess-room, for the medical staff, who live in billets or the adjacent Temperance Hotel. The present nursing staff is inadequate for much of an extension of the numbers of patients. The wards are ill-equipped with instruments and supplies—for instance, there is not a single sphygmomanometer, hæmoglobinometer, jerk hammer or sedimentation-rate apparatus in the hospital. What in days gone past was the Pathology Department contains now two coffins and is being sought by the chaplain for a chapel. And many more inadequacies might be catalogued.

But as a Greek philosopher pointed out, everything is in a state of flux. Everyday Orpington P.A.1 Hospital gets a little better. New supplies arrive. New buildings go up. New and more wonderful manœuvres become possible on the patients. The single pub, the almost country air, the long walks from billets and the Temperance Hotel promote health if not always happiness. One day this will be a pretty good hospital, we say to ourselves, but heaven present us with a mild winter. And by the next number of the *Gazette* we'll be more cheerful, we hope.

E. B. R.

Life in the Wilds of Kent

Oh, who would be in Orpington
If she could be elsewhere?

SUCH is the burden of our song these days, especially in the drab and cheerless hour before sunrise, when with undignified haste and skirts a-flying we pedal hurriedly to hospital, to be on the wards by 7.30 a.m.

Practically to a man, or rather woman, the Massage School has joined the Civil Nursing Reserve, and are expending their energies in attending to the sick and senile of the Kent County Council. They are a pathetic sight, these old men and women whom no one will have. Some of them are dears; some are—definitely not. But we hope to learn something about nursing from the experience.

But a benevolent government has not always paid us for such work. When we first arrived the days were sunny, and we sat outside making dressings, swabs and splints sufficient for three armies, I should imagine. Then followed hectic days of window-pasting, when we became gloriously entangled in flour paste and sticky brown paper, got cricks in the neck from straining for unreachable windows, and housemaid's knees from cutting endless patterns on the floor. But

we survived, with frequent intervals for coffee and a little gossip. At last there could have been no chink uncovered; no sooner had we finished than someone supplied roller blinds for most of the windows, and our handiwork was partially removed.

When we came here, one of us at least expected to be lodged in a tent, so it was a pleasant surprise to find that we were billeted out between four walls. The first few days, however, produced several wan-eyed people complaining of kicks and lack of bed clothes, due to two sleeping in a single bed, and other minor inconveniences. However, time and a harried billeting officer have straightened things out, and most people are settled, if not for the duration, at least for a few months. Indeed, the unfortunate, hard-working, people of Orpington merit a special vote of thanks for their unstinting kindness and generosity.

For some Londoners it has been a unique experience to go shopping on a bicycle—("My dear, you aren't anyone if you haven't a bicycle these days")—to stop and chat in Woolworth's or the Post Office, to stumble a mile through inky blackness after a night out in London, to have buses that only run once an hour or so.

But one has forgiven everything, exploring the lovely Kentish countryside. There are little villages tucked in remote corners, the tawny glint of leaves in a dying sun, the scarlet spark of hips and haws in the hedges; birds wheeling in a rain-washed sky; cows, dreamy-eyed in the fields—a peace that, despite external unrest, soaks to one's very core. One must pinch oneself to realise that such a futility as war exists.

M. M. N.

North of the Border

A FEW days after Zero three London O.T.C. Officers received orders to report at X on a given date and a few days later instruction to proceed to a different station some miles distant. It transpired later that the site first selected was a disused foundry, with lead dust inches thick on the floor, railway lines traversing the building, a glass roof (a problem for the Passive Air Defence Officer), but no windows, one water pipe, and almost negligible sanitation. By comparison and literally, our present surroundings are almost palatial, for we occupy an ancient abbey, which for the past three years has been used as a college.

Here, then, 18 Officers and some 240 "other ranks" from the length and breadth of the British Isles congregated about the middle of September and proceeded to oust stuffed elephants, polar bears, and a few civilians. The more valuable paintings (one is stated to be worth £60,000) were boarded in, or otherwise protected. Thought was next given to the question of food and other creature comforts. The Quartermaster, a really useful and delightful person, proceeded to Ordnance, only to find that it was in order for stores to be drawn, but not before a fortnight after our arrival. Nevertheless he managed to draw blankets and certain other necessaries. The next day's problem was to provide cooking facilities. A request to Ordnance for a Bluff cooker, a splendid field outfit capable of cooking for some hundreds, was turned down out of hand. It was discovered that there were seven only in the district, but the next day our Quartermaster arrived back with one. And so his excellent efforts have gone on until this week when a blow has fallen, for an order has gone forth (we think we know the reason) that no Quartermaster henceforth will proceed direct to Ordnance Stores. The Quartermaster has not been seen all day; it is believed that he has provided himself with a false moustache and, with some trepidation, has again sallied forth in defiance of the order.

Meanwhile many other activities have gone on, potential N.C.O. instructors are being instructed, others will become Gas, Drill, and Physical Training Instructors, and eventually we aim at turning out trained personnel in considerable numbers.

The lighter side has not been forgotten, for wireless sets are installed, a concert has been given, a free evening at the local cinema starts this week, and E.N.S.A. promise their first entertainment next week. Great argument has arisen in connection with the latter, for officers' cars have to provide conveyance from the nearest city. It has been decided by an overwhelming majority that the married officers shall transport the ladies of the party, and the bachelors the remainder.

So far we Sassenachs have managed without interpreters, and this is all the more remarkable as those officers who do not oroginate from Scotland seem to be Regulars from Ireland. In Mess Meetings it is a little disturbing when considering remuneration for the laundry woman to understand that "the run of her teeth" means only that board is included in the proposed payment.

And so we go happily on.

H. H. K.

Æquanimitas, reprinted from the Third (American) Edition by SIR WILLIAM OSLER, BT., M.D., F.R.S. Biographical note by SIR WALTER Langdon BROWN, M.D., F.R.C.P. Published by Messrs. H. K. Lewis and Co., Ltd. *Price* 7*s*. 6*d*.

NO more appropriate time than the present could be chosen for the appearance of a new edition of a book bearing the title Æquanimitas. The substance of this volume is so well known to the profession that to the majority its further recommendation would be presumption, and to all, criticism of its contents an impertinence. To those who have hitherto denied themselves the pleasure of reading it, we would counsel such indulgence and to the remainder the notice of a new edition may serve to arouse a desire for a renewal of contact with the wise sayings of one whose fame has spread far beyond the confines of his own sphere.

The production of this volume at a price so reasonable is at once a tribute to the skill of the publishers and a reflection of the anticipated demand from the public. The appearance of the volume is proof of the former; its ready sale will confirm the latter.

X.Y.Z.

The Tissues of the Body—An Introduction to the Study of Anatomy. By W. E. LE GROS CLARK. Published by the Oxford University Press. Pp. 363+ix. *Price* 15*s*.

I SUPPOSE few people enjoy Anatomy, at any rate the kind of Anatomy taught four or five years ago. (Possibly in a few teaching schools it has altered for the better since then.) Even Professors of Anatomy are remarkable for the neglect rather than the pursuit of their subject. They research in other fields—comparative anatomy, archæology, cytology, endocrinology—rather than explore the arid mass of facts they teach medical students. For the unfortunate majority of students Anatomy consists of the toil of memorising the origins, insertions and nerve supply of muscles, the names, ridges and grooves of bones, the courses and distributions of blood vessels and nerves, the morphology of the viscera. For nearly all, this subject is as dead as the corpse soaked in formalin on which it is studied.

Now is there any reason why Anatomy should be so dull? Why, for instance, should the morphology of that wonderful instrument the human hand be so uninteresting? The answer is, I think, that the study of form without any relation to its function is merely burdensome. It is equivalent to learning the sound of words without understanding their sense. Anatomy and Physiology are not different subjects. They are two aspects of living cells in action.

But the study of the motionless form of the old dead body is not the half of Anatomy. Anatomy itself is a dynamic subject. In his preface to this book Professor Le Gros Clark notes: "Until recently, however, the subject of Anatomy in the teaching curricula of this country has been mainly confined to the study of the end-products of structural organisation, that is to say, to the descriptive study of the structural complexity of mature organisms. . . . The teaching of structural organisation as a dynamic process has been much neglected. . . . Medical educationalists have come to realise the importance to the medical student of a knowledge of the fundamental principles of the growth, differentiation and structural adaptation of living tissues, even if this must be gained at the expense of some superfluous knowledge of the topographical minutiæ of human anatomy." This book is an expansion of lectures given as an introduction to the study of "the growth, differentiation and structural adaptation of living tissues."

It is well printed on good paper, and well bound. The illustrations—photographic and diagramatic—are excellent. It is a pleasure to own such a book,

even were its contents without interest. But its contents are good. After a couple of introductory chapters, Professor Clark devotes a section to each tissue—connective tissue, blood, lymphatic tissue, skin, nervous tissue, etc. The chapter on bone may be used to illustrate his method. In this he describes first the histology of bone and the form and functions of the periosteum, then the growth of bone, the roles of centres of ossification and osteoblast and osteoclast, then the experimental study of bone growth by madder feeding, cardiography, etc., then the mechanics of bone, and the effects of mechanical stress on bone-growth, then factors initiating ossification, and finally the nervous and vascular supply of bones and some elements of their metabolism. These subjects are not presented as so many tabulated facts (*vide* any standard Anatomy textbook), but as observations of growth and form which have been made and problems to which these observations have given birth. After reading this chapter, a fibula is no longer a long thin piece of osseous material with some wretched muscular attachments to be remembered, and can you tell me if it's the right or left one?—to be answered. It is, during life, a wonderfully plastic structure, of miraculous development and growth, acted on by a multitude of forces, dependent on as yet unelucidated biochemical processes, and yet a mechanically excellent strut.

This book is an introduction to the subjects it treats of, but an adequate bibliography for further reading is contained in footnotes. It may be warmly recommended to all students of anatomy who would have a little of the study of life breathed into their dead and dreary subject.

E. B. R.

Handbook of Physiology and Biochemistry. By W. D. HALLIBURTON and R. J. S. MCDOWALL. Published by John Murray. 36th Edition. Pp. 977+x. *Price* 18*s*.

AN ideal textbook of physiology should contain enough matter to satisfy the needs of students reading for examinations, clearly presented so that they can assimilate it readily, and it should also contain enough of controversial matters to encourage those interested in the subject to read some of the original literature. It is to be regretted that in these respects this new edition of Halliburton fails to be an ideal textbook of physiology and is, in fact, no more than its title expresses, a handbook to be used in conjunction with a series of lectures. To the reviewer it seems that only the fringe of the subject has been touched, and any student relying entirely on this book would have only a superficial knowledge of the subject.

Some new matter has been included in this edition and several chapters have been rewritten. The functions of the cerebellum, the absorption of fats, reproduction and the sex hormones, the vitamins and the cochlea have been included in this revision. The author, in the preface, claims to have brought the chapter on the formation of the urine up to date, but to the reviewer this claim seems exaggerated.

The section of the book dealing with the circulation is well done and there is a valuable chapter on the control of the circulation, with many useful diagrams. There is at the end of the book a table of physiological data which should be memorised. This is an excellent feature. Of the 977 pages in the book, 127 are blank and are intended for note-taking. As few students to-day write notes in their textbooks it seems that these pages could well be omitted, thereby reducing the bulk of the book.

Dental and Conjoint students may find this a suitable book for their examinations, but it is not recommended to 2nd M.B. students, except as a preliminary book, to be read in the first three months of their study of physiology.

M. L.

Human Histology. By E. R. A. COOPER. Published by Messrs. H. K. Lewis & Co., Ltd. Pp. 424. *Price* 16*s*.

THIS book on histology has been written as a guide for medical students and as a revision book for post-graduate students. It begins with a brief account of the physics of the microscope and of histological technique. The main body of the book is taken up with a classified description of the tissues. Each system is taken in turn and a detailed account given of the microscopic appearances.

The text is accompanied by photographs of preparations. These are very numerous and should undoubtedly fulfil their purpose, viz., "to obviate the necessity for 'imagination,' which the student sometimes surmises is essential in histological work." Of particular interest is the photograph on page 183. This is of a lung in which the vessels have been injected. The capillary network enveloping each alveolus is demonstrated and the enormous vascular area available for gaseous interchange can be appreciated. These photographs make the book one which can well be used for reference at the time of examining histological specimens.

In the section on hæmopoiesis I was unable to agree with the suggestion that the large lymphocyte is identical with the hæmoblast or primitive red cell, but this is very difficult to disprove.

As a whole the text keeps off argumentative problems and is clear and concise. For this reason it is suitable for students taking medical examinations in Anatomy and Physiology.

R. E. H.

Beesly and Johnston's Manual of Surgical Anatomy. Revised by JOHN BRUCE, M.B., F.R.C.S. (Edin.), and ROBERT WALMSLEY, M.D. Published by the Oxford University Press (Humphrey Milford), 1939. Pp. 733. *Price* 20*s*.

THE very number of available textbooks of surgical anatomy is a testimony to their success, and this success is an impeachment of the Anatomy of our medical schools. The student who has successfully memorised the multitudinous facts of human anatomy and has passed his Second M.B. finds that he needs a guide to what he must remember and what he may forget.

This book is more than a textbook of essential anatomy. It contains a great deal of sound clinical teaching as well, the methods of surgical approach, the mechanisms of the commoner fractures and dislocations and a good deal of morbid anatomy are discussed in adequate detail.

It is astonishing that so much reliable information can be contained in a book of such modest size.

J. E. S.

Physiology of the Nervous System. By J. F. FULTON. Published by the Oxford University Press. Pp. 630+xlv. *Price* 25*s*.

THIS book is printed in good type on poor paper and is bound uninspiringly, as are some few of the Oxford University Press's Medical Publications. It reads easily and contains many good diagrams and illustrations. In its six hundred odd pages is to be found an outline of the physiology of the Nervous System, and on the whole a lucid outline.

The first part of the book deals with the components of the reflex arc—receptor, afferent nerve, central synaptic transmission, efferent nerve and motor unit. The rest of the book (about three-quarters of it) deals with the higher nervous centres and the control they exercise over the lower spinal centres. The cerebral cortex has more than one quarter of the book devoted to it. At the end of the text is a valuable bibliography containing 1,361 references. In the scheme of this book there is one defect and that is the omission of even a brief review of what is known of the transmission of a nervous impulse along a nerve fibre.

Since this book is an outline and since knowledge of neuro-physiology, though ever increasing, is incomplete, certain sections of it are little more than catalogues of scattered observations, perhaps with a few comments added by the author. Also, because this book is an outline, certain other sections are compressed and need amplification from the excellent references. But there are also lucidly informative chapters—for instance, that on the hypothalamus—and no section is meaningless or unreadable.

Dr. Fulton dedicates this book to students of medicine "who must bridge the gap between the concepts of neuro-physiology and the problems of clinical neurology," and clinical information is to be found in many of its sections. For instance, there is a discussion of decerebrate rigidity in man with notes of three cases; diabetes insipidus, autonomic epilepsy, and the Argyle Robertson reaction are shortly reviewed; and there is much else of clinical interest.

Dr. Fulton has produced a valuable handbook of the physiology of the central nervous system, which may be dipped into by those casually interested, or read, marked and used for its references by those more seriously interested, in both cases with profit to the reader.

E. B. R.

Symposium on the Synapse. By HERBERT S. GASSER, JOSEPH ERLANGER, DETLEY W. BRONK, RAFAEL LORENTE DE NO, ALEXANDER FORBES. Published by Charles C. Thomas. Pp. 472.

SHERRINGTON'S brilliant and painstaking analysis of the phenomena of conduction in the nervous system laid the foundations of synaptic transmission upon which foundations neurophysiologists have built an imposing edifice. The conception of the synapse rested primarily on the apparently striking difference between relative simplicity and inelasticity of conduction in the neurone by itself as compared with conduction in that system of neurones called the reflex arc. The synapse was introduced to explain this discrepancy and to the synapse were credited a number of highly specialised properties of which the neurone was considered incapable.

The recent technical advances in experimental method, in particular the introduction of sensitive galvanometers, oscillographs and valve-amplifying systems, have enabled physiologists to follow in minute detail the propagation of action currents through neuronic systems. One result of this advance has been to demonstrate an extreme degree of complexity of conduction in the neurone and to show that the neurone alone can disclose properties remarkably similar to those which led Sherrington to postulate the existence of the synapse. Such properties as facilitation and one-

way conduction, which in the Sherringtonian view belonged solely to the synapse, have now been demonstrated in the simple fibre.

This symposium contains five papers by masters of the modern methods of neuronic analysis. In these papers they examine the question as to whether there really is any fundamental difference between conduction in the nerve fibre and the synapse. The evidence they present is not claimed to be conclusive, but it provides very serious food for thought by those interested in neurophysiology. These writers present a very learned, a very intriguing, and at the same time a very loving challenge to the theory enunciated by the master who set their feet upon the road.

W. R. S.

Claude Bernard, Physiologist. By J. M. D. OLMSTED. Published by Messrs. Cassell & Co., Ltd. Pp. 318. *Price* 15*s*.

TO most medical students, Claude Bernard is a somewhat dim figure whose name seems to appear in almost every branch of physiology. To the more studious his name is associated with a "*piqure diabetique*" and with the expression "the internal environment." Now that Professor Olmsted's book has appeared, every medical student should read it, to become more fully acquainted with the life and works of this pioneer of modern physiology.

Claude Bernard did not take up the study of medicine until he was twenty-one, the first three years after he left school being spent apprenticed to a pharmacist. His original ambition was to become a dramatist, and during his apprenticeship he wrote a play. It was, in fact, the critic to whom he showed this play who advised him to study medicine. He later became assistant to Magendie, then at the height of his powers, who was impressed by Bernard's skill at dissection, and it was during this time that Bernard discovered his aptitude for experimental physiology.

Professor Olmsted describes his rise in the scientific world, and he also gives a picture of his private life, of his unhappy marriage, his many friendships, his love for his vineyards, and his service as a senator.

The later chapters of the book give an account of the major discoveries, the glycogenic function of the liver, pancreatic digestion, the vasomotor nerves, and the action of curare. An interesting chapter describes some of his lesser-known experiments, such as the demonstration of the sugar ferment invertase and the proof that plants as well as animals are susceptible to anæsthetics. He was also the first to show that sulphuretted hydrogen could be excreted by the lungs, and so gave the experimental basis for the well-known association of halitosis and intestinal upsets.

This book can be recommended to all medical students and all those interested in the history of physiology.

M. L.

Clinical Pathology. By P. N. PANTON, M.B., and J. R. MARRACK, M.D. Published by Messrs. J. & A. Churchill, Ltd. 4th Edition. Pp. 502. *Price* 16*s*.

A NEW edition of "Panton and Marrack" has appeared, five years after its predecessor. This is evidence of its sustained popularity among students and pathologists.

There is little change in the text, the only new chapter being a short account of pregnancy tests. Here and there new methods have been added and old ones omitted, so that the length of the book is much the same as it was.

The clinical description of diseases has not been so carefully brought up to date as the more purely pathological subjects; this is to be seen in the section upon the blood, and in some parts of the section on the alimentary system.

The present writer has never been convinced of the necessity of a book on Clinical Pathology in the armamentarium of every student. The lending libraries have them, and of course every school library and clinical laboratory. This book is probably the best of its kind and scope.

W. D. B.

Genetics and the Clinician. By LINDSAY RIDE. Published by J. Wright & Sons. Pp. 146. *Price* 10*s*. 6*d*.

CONCERNING genetics and biology generally, the average medical man would have to admit that his knowledge of it was relegated to the dim memory of half-forgotten things, if not to the actual unconscious. This excellent book by Professor Ride is designed to revive this knowledge and show how it is to be applied to practical medicine. His account of the principles of Mendelian genetics is comprehensible as well as comprehensive. Though these principles have been worked out for the most part on the inevitable drosophila, yet the case for their application to human problems is proved in some conditions such as Huntington's chorea (dominant), amaurotic idiocy (recessive) or hæmophilia (sex-linked). In other illnesses such as the manic depressive psychosis, the case is strong but not conclusive, but it is probable that the constitutional factor in disease will be more and more emphasised as medicine progresses. Professor Ride suggests that susceptibility to certain tropical diseases such

as sprue may be due to inherited variations in metabolism. The principle of dominance, reversible according to environment, may prove to be widely applicable to human genetics, especially in psychological medicine.

The most detailed chapter in the book is that on blood group inheritance, a subject which is now of considerable medico-legal significance. One could wish for a similarly detailed account of other known inheritable characters in man, but perhaps that is too much to expect in a small book such as this.

In view of the important part the general practitioner can play in developing our knowledge of human inheritance, Professor Ride makes a plea for increased teaching of genetics in the medical schools. The question of why one patient should develop a disease and another should not has been too long neglected by general medicine, and this book serves to provoke enquiry into this important problem. There is a useful bibliography, and this book can be recommended to the student of genetics as well as to the general physician and medical student.

F. W. B.

Textbook of Medical Treatment. Edited by D. M. DUNLOP, M.D., F.R.C.P. (Edin.). Published by Messrs. E. and S. Livingstone. Pp. 1,127. *Price* 25*s*.

Treatment of Some Common Diseases. Edited by T. ROWLAND HILL, M.D., M.R.C.P. Published by Messrs. E. and S. Livingstone. Pp. 398. *Price* 15*s*.

TO the medical men of a country at war there are great inducements to thinking surgically, both in diagnosis and treatment, and many of the surgical excesses in treatment which were fashionable twenty years ago can be assigned to this cause. Especially to the senior student or newly qualified man, whom war deprives of the opportunities of leisurely reading and thorough examination of patients, the danger is great that he will fall into the habit of treating the disease and not the patient. These two books seem almost designed to counteract this danger, and though no doubt their publishers does not agree, we regard the present as an excellent time for their appearance.

The *Textbook of Medical Treatment*, which is printed in a similar form to that of Dr. Conybeare's *Textbook of Medicine*, is a compact but full-length survey of its subject, from the pens of twenty-seven teachers in Scottish Universities: sixteen from Edinburgh, eight from Glasgow and three from Aberdeen. The twenty-three sections of which the book is made up are of a remarkably level quality; the articles hang together so well that one imagines that much consultation must have preceded the writing of them—unless, indeed, the tradition of medical teaching in Scotland is more coherent and broad-minded than in the South.

There are useful summaries of the clinical pictures of diseases before their treatment is considered in detail, but in addition to this, as is indeed inevitable in any good book on treatment, much pathology and diagnosis occurs implicitly in its pages. It does not, of course, supersede any textbook of Medicine as a means of first acquaintance with the subject as a whole, and for this reason it cannot be said that it is necessary for qualifying examinations, with their justifiable insistence on diagnosis, but it will be useful to senior students who have digested a fair amount of Medicine and are interested in individual cases. Its greatest value will be to recently qualified men, able for the first time to read their subject free from the discipline of examinations, and to any practitioner who wishes to keep in touch with new lines of progress. As we observed before, this book's constant insistence on the need to remember the wood, while dealing with the trees, makes it more valuable, not less, in war-time, when there are so many tendencies operating the other way.

In a book of this size, it is impossible to refer specifically to all the articles, but there are various points worth mention. The new chemotherapy is fully described in all the sections where it is apposite, and its application is kept close to the research work behind it. There are chapters on Industrial Diseases, and Psychotherapy in General Practice, which deal concisely and interestingly with these subjects, which are too often regarded as the perquisite of the expert, and the last chapter, on Technical Procedures, is exactly what is required by every recently appointed house-officer.

The *Treatment of Some Common Diseases*, also published by Livingstone, is a collection of twenty-nine essays on treatment by contributors who, as the Editor says in his preface, have one privilege in common—their membership of the honorary staff of the Southend General Hospital. Of these essays, ten are on medical subjects, twelve on surgical, while two belong to the province of Gynæcology and Obstetrics. In addition to these, monographs on ocular complications of some common disorders of the skin, and on dental caries show the wide scope of the book.

The authors have not set out to make a textbook, and since they have no obligation to mention every disease in its proper proportion, each has written freely on his own subject, devoting as much space

to it as he himself thinks it deserves. This method of compilation has inevitably led to irregularity of value in the book, but the Editor has been lucky (or skilful) in that none of his contributors seem to be riders of hobby horses. Indeed the insistence on the wide view is almost as notable here as in the Edinburgh textbook.

This is a book for supplementary reading. It is often a relief after spending much time with the careful and objective style of a textbook, to see a subject from the viewpoint of a man writing from his own experience. It is often very informative to do so, even when one disagrees with him about his methods or conclusions.

W. D. B.

Thomson and Miles' Manual of Surgery. Published by the Oxford University Press. Vols. I and II. Ninth Edition. Pp. 1,371. *Price* 21*s*.

WE welcome the new edition of this textbook. The high standard of previous editions has been fully maintained, and the attractiveness of the work has been enhanced by its publication in two volumes instead of three. We recommend this textbook to any student who is looking for a sound book on General Surgery.

J. E. S.

An Introduction to Dermatology. By Sir NORMAN WALKER, M.D., LL.D., F.R.C.P., and G. H. PERCIVAL, M.D., Ph.D., F.R.C.P. Published by Messrs. W. Green & Son, Ltd., Edinburgh, 1939. Tenth Edition. Pp. 391, with 102 Plates and 96 Illustrations. *Price* 20*s*.

IN this edition the writers have rearranged certain sections in an effort to group conditions which are considered to bear an ætiological similarity or a clinical resemblance to each other. They have expanded the section on Dermatitis and evolved a nomenclature which is somewhat descriptive of the ætiological and clinical aspects of the various types. The increased incidence and greater economic importance of Industrial Dermatitis has justified a more detailed consideration of this subject.

There are many works available which might fairly be described as introductions to the more common diseases of the skin; this particular book differs very little except that more lengthy descriptions are undertaken and that an exceptionally good series of illustrations and plates are included. There is, however, one chapter that students should find particularly useful; this describes the more common inflammations of the skin in summary form from a consideration of the distribution of the lesions.

Eczema is debagged and redressed as Dermatitis. The writers say that to the uninitiated every skin eruption is an eczema and this cannot be denied; they substitute a nomenclature descriptive of the condition, but this only confronts the beginner with a greater number of names and intensifies the reputed obscurity of skin diseases, for his seniors will not be speaking the same language. A new terminology should have been presented to the experts in the first instance.

Rather dogmatic opinions are expressed, and this can be appreciated in an introduction. The writers set out to describe local applications which "pertain exclusively to Dermatology," but diet and internal treatments are often inadequately stressed. In fact, throughout the book one is conscious of a conservatism perhaps wise in an introduction, but certainly resulting in an incomplete consideration of the conditions. The diet in Sycosis is undoubtedly worthy of mention, and the value of ultra-violet light in acne is quite widely acknowledged. The treatment of Herpes Zoster is primitive, and what is "prontosil" (p. 82)? Impetigo is sometimes more resistant to treatment than we are led to believe, and sulphonamides are sometimes dramatic in their effect and might have been mentioned. The statement that the sulphonamide group of drugs has proved disappointing to dermatologists is open to criticism; it depends what one expects, for they certainly find their place in treatment.

So many of the works on Dermatology are presented in synopsis form that the descriptive matter in this book will be much appreciated; the illustrations themselves make it worthy of perusal, and it should be quite widely appreciated.

D. E.

Diverticula and Diverticulitis of the Intestine. By HAROLD C. EDWARDS, M.S., F.R.C.S. Published by Messrs. John Wright & Sons, Ltd. Pp. 335. *Price* 25*s*.

TO provide a readable book which has for its subject a particular abnormality of a portion of one system of the body is in itself an achievement. Mr. Edwards has, however, done more than this, for in his treatise on intestinal diverticula we have the combination of personal experience with a careful and comprehensive survey of the literature. The origin of the various diverticula is fully discussed, and in each case the author's views are supported in a logical and convincing manner, but at the same time there is a complete absence of dogmatism and a ready recognition is given to conflicting theories. Based, as it is, on the Jacksonian Prize Essay for 1932, this work bears ample witness to the work that Mr. Edwards has devoted to his subject.

The illustrations, many of which are in colour, are excellent, and there is a commendable economy in the use of long case-histories. A bibliography is included which is calculated to satisfy the wants of all who wish to probe the subject further. This book will appeal to all who are interested in gastro-enterology, both surgeon and physician alike. To those who set store by the form in which a volume is produced, the name of the publishers will be sufficient guarantee.

G. A. M. L.

The Treatment of Rheumatism in General Practice. By W. S. C. COPEMAN, F.R.C.P. Published by Messrs. Edward Arnold & Co., Ltd., London. Third Edition. Pp. 265+ix. *Price* 10*s.* 6*d.*

THIS book treats simply and amusingly of "rheumatism," acute and chronic. The diseases described are rheumatic fever, chorea, fibrositis, gout, rheumatoid arthritis, osteo-arthritis and spondylitis. The clinical descriptions are clear, modern views on ætiology are summarised, and treatment is detailed fully. About two-thirds of this book is devoted to describing treatment—such treatment as may be suggested or supervised by a general practitioner. This book may be recommended to all whose chronic arthritic patients are giving them trouble. Here may be found details of gold, dietary, endocrine, colonic, medicinal and balneo-therapy. This is the third edition to appear in six years, sufficient evidence of popularity.

E. B. R.

Gynæcology. By HERBERT H. SCHLINK, M.B., Ch.M. (Sydney), F.R.A.C.S. Published by Messrs. Angus & Robertson, Ltd. Pp. 543, with 181 Figures. *Price* 32*s.* 6*d.*

THIS book was intended by the author as a textbook for students preparing for final examinations, but from this standpoint it falls short of the standard required by most examiners.

Although the chapter headings are well arranged and most of the necessary facts are present, they are so inundated with unnecessary sub-headings and padding that the student would waste a considerable time in reading superfluous material in order to get at the essentials.

The chapter on Anatomy is inferior to that in any standard anatomical textbook, but it is well illustrated. Throughout the book the most interesting features are the excellent micro-photographs, which are all original and very well reproduced. The section on Physiology and Histology is well arranged, particularly that part which deals with the Endocrine glands and their secretions in relation to the histological changes taking place in the uterus and the ovaries during the menstrual cycle. The chapter on Local Inflammation covers some ground not usually touched on by standard works, but the statement that Chronic Cervicitis is mainly due to the gonococcus can hardly be allowed to pass unchallenged.

In the treatment of Venereal Diseases, the author devotes two pages to a detailed account of local treatments for Acute Gonorrhœa, while he dismisses in two lines the more recent and proved treatment with sulphonamide compounds! The chapter on tumours and new growths contains a good classification of ovarian tumours, but includes operative treatment which would be more in place in the section on Operative Gynæcology. The final chapter deals with post-operative complications and treatment, and here again a standard surgical textbook would supply all the detail and the correct treatment in much less space.

P. S. S.

Hygiene for Nursing Students. By AGNES PAVEY. Published by Messrs. Faber & Faber, Ltd. Pp. 289. *Price* 6*s.*

FOR some time, there has been required a textbook of hygiene suitable for nurses taking their State Examination. Most existing textbooks of hygiene contain large amounts of matter more suited to sanitary inspectors or food inspectors than nurses. Sister Pavey, by confining herself entirely to those subjects essential to the examination, has produced an ideal textbook of hygiene for nurses.

The book covers the whole course and is well balanced. The text is well written and adequately amplified by many clear diagrams. A feature which should prove useful is a selection of questions from recent State Examinations at the end of each chapter. The book contains an account of most of the recent advances in hygiene and includes a description of the electron ultra-microscope used in virus research. This excellent book is warmly recommended to all nurses working for their State Examinations, and to all those wanting a sound knowledge of the fundamentals of hygiene.

D. G. P.

Your Baby's First Year. By MARIE C. STOPES, D.Sc., Ph.D., F.L.S. Published by Messrs. Putnam & Co., Ltd. Pp. 283. *Price* 5*s.*

THIS book is intended for the "intelligent mother" in easy financial circumstances, and, as such, it provides a comprehensive guide to the rearing of a baby during his first year.

Every detail of a baby's surroundings, diet and training is dealt with, and although it is doubtful whether the majority of Dr. Stopes's readers are in a position to furnish their infants with such items as revolving vita-glass garden shelters, there is much sound sense in her plea for more well-planned nursery equipment, and sun, fresh air, quiet and pure foodstuffs as essentials for a baby's well-being.

In the chapters on " Weaning and Milks " and " Other Foods," too much space is perhaps devoted to quotations from, and comments on, the views of other authorities on infant feeding, and also to the introduction of comparative tables of food constituents, and the discussion of various chemical substances. The average mother, who has no particular chemical or scientific knowledge, requires only a diet sheet from month to month with a simple explanatory chapter on the various changes and additions to the diet. Anything more than this tends to make her feel that the book is " over her head," and so a lot of its use to her is lost. Apart from this criticism, Dr. Stopes's actual diet sheets are clear, and she provides recipes for broth-making and the preparation of milk for weaning or artificial feeding.

The concluding chapters on infant hygiene are practical and instructive. She writes with sympathy and understanding of the physical and mental growth and well-being of the child.

P.B.

From Natural Causes. By JOSEPHINE BELL. Published by Messrs. Longmans, Green & Co., Ltd. Pp. 269. *Price* 7*s.* 6*d.*

THIS is a detective story whose problem is essentially a medical one. It is more likely to be of interest to those who like to see their professional world reproduced in fiction, than to habitual readers of detective stories, for the plot is not of the high order of complexity required of their specialised art.

The characterisation is basically sound, but not sufficiently highly developed for the book to claim attention as a novel, yet it is too clear for there to be much doubt as to who is the criminal. Thus the author's admirable attempt to emerge from the " thriller " into serious fiction fails in its object.

Medical scenes are credibly described. The dilatoriness of Military Surgery is contrasted with the despatch of a surgical unit of a London teaching hospital, and memories of the Dissecting Room are evoked by such dialogue as :—

" Is this the anterior tibial artery ? "

" I suppose so. No, it isn't. It's the posterior tibial."

" How do you know ? "

" Because it's tied in the middle with string where you cut it in half, dissecting it."

The detective-hero is a doctor attached to a Research Unit, but who has heard of a demonstrator of anatomy in a London School of Medicine who " took his Primary with a view to becoming a surgeon, but did so well in Anatomy that they snapped him up for the college." ?

W. D. B.

Surgical Diagnosis. By STEPHEN POWER, M.S., F.R.C.S. Published by John Wright. Pp. 228. *Price* 12*s.* 6*d.*

IF good can come out of evil, one beneficial result of the war may be a temporary arrest of the present spate of redundant medical books. A new book on Surgical Diagnosis must be better than, or at least as good as, those already on the market, or it will fail to attract the medical publisher. In the reviewer's opinion better books on this subject exist already.

The author has collected the clinical features of most surgical conditions, added a number of indifferent diagrams and a few radiographs, and has offered the finished work to the world with the pious hope that it will form " a profitable survey of the whole field of surgical diagnosis."

There are some obvious errors ; for example, the diagram of the tendon sheaths of the palm is grossly inaccurate, and the lower extremities are said to be mainly involved in Raynaud's disease, but apart from mistakes of this kind we cannot recommend the book. It is too advanced for the beginner and is unlikely to appeal to the more advanced student or post-graduate.

J. E. S.

The Starlings' Revue

THE Starlings' Revue No. 4 was presented on Saturday, 7th October, in the Physiology Theatre before a large audience. As an entertainment it was well up to the standard of its predecessors. Now that the show is a recognised extertainment certain impressions can be crystallised and some criticisms may be formulated which hitherto have been latent.

The arrangement of the various items has a pleasing symmetry : an opening chorus, a chorus at the end, in the middle a dance. The pauses between the " turns " are, however, still too long, and consequently there is a lack of " snap " and slickness which is rather disconcerting. Gerry O'Gorman is prodigious, but even he cannot fill in an occasional hiatus.

The chorus works hard, looks decorative and sings well; but at times they attempt too much, and one feels then that their powers are incommensurate with their responsibilities. Miss Elsie Salamons has worked wonders, but there is still room for improvement in their synchronised thigh-waggling. A minor annoyance is the slovenly way in which the curtain sometimes falls; this has detracted from the effectiveness of several acts in which a smart "curtain" is essential.

These criticisms apart, it is pleasant to record our appreciation of the show as a whole. Its informal character is especially delightful.

The firm of Spurrel and Baker

Geoffrey Channing, a newcomer, played modern syncopated music with a high degree of technical skill and made an excellent impression. We hope to see more of him. The newer firm of Spurrell and Baker showed us what might go on behind the scenes when men are signed up in Physiology. This feature was full of delicate humour and satire, but did not quite reach the high standard of their last appearance. Dr. Spurrell's unsmiling face and magisterial air contributed greatly to our enjoyment, and we trust that this firm will be able to appear regularly.

Miss Judy Shirley could not be present, and her place was taken extempore by Mr. Chalky White, a local worthy. His humour as a raconteur was distinctly racy.

"Long Distance" was an amusing sketch, written by John Gordon. It was effectively put over by Miss Salomons and Messrs. Gordon, O'Gorman and Mars. Gerry O'Gorman played the part of the harassed man trying to get through to HOP 1281 while others rang up Monte Carlo and Hollywood with superlative ease.

Miss Brenda Perry and Mr. Hedley Atkins were warmly received. Their two songs were entirely different, one sentimental and the other from an Eddie Cantor film. This latter involved a certain amount of pantomime and stage-play into which the participants entered with zest.

Gerry O'Gorman and John Gordon appeared in one of those scenes in which an attempt to do something coherent is frustrated by continual noisy and witty interruptions. John Gordon was at times a little difficult to hear, but his partner laboured under no such handicap.

Mr. Moseley sang three Irish songs, one of them translated into Welsh. The great talent contest which followed produced three entrants: the Coffey brothers playing Irish tunes on the violin, Weston Wells lugubriously reciting humorous verse and Miss M. C. Davies, a Guy's nurse, singing. The latter was, by general consent, adjudged the winner.

William Mars was the surprise hit of the evening. Besides appearing in a sketch with John Gordon and others, he gave a series of remarkable impersonations, which included Charles Boyer, Maurice Chevalier, Paul Robeson and Bing Crosby, all of which were extremely funny.

Our special thanks are due to Miss Elsie Salamons, who has worked so hard with the chorus and who has herself graced the opening scene; to Gerry O'Gorman, a cheery and unselfconscious compère always; to Bill Trethowan and de Gruchy at the pianos; and to Tom Hills, the producer.

The new back-drop showing an impressionistic Piccadilly Circus is most artistic and effective. Lastly, let us not forget John Musgrove, the stage manager and those who co-operate with him.

May the Starlings continue to chirp as merrily as they have done hitherto!

A. G. C. C.

Sport and Hospital Information, etc.

Rugby

Guy's v. King's College Hospital

AT Honor Oak Park on Saturday, October 14th, Guy's received King's College Hospital as their visitors and, after a very interesting game, were successful by a placed goal, a penalty goal and 3 tries (18 points) to nil.

Although beaten by such a wide margin of points, King's had far more of the game than the score suggests. Ably led by W. B. Young, the Scottish International, they recovered from an indifferent start and during the first half nearly scored on two or three occasions, but towards the end they were kept on the defensive and in the last few minutes the Guy's three-quarters registered eleven points without response.

Guy's were strongly represented, and in the early stages King's did well to check several clever movements between Babrow, Kynaston and Charlton. A grand effort by this combination nearly led to a score after five minutes, but Charlton, travelling at top speed, just failed to collect a pass when he had the line at his mercy.

King's retaliated, and Jenkins followed a long kick, gathered, and sent his wing away, but fortunately Skea saved splendidly.

Van Steytler was outstanding, and proved a tower of strength. Time after time he relieved the pressure with long raking kicks which seldom failed to find touch.

He had a splendid understanding with Halamandres, and as a result of one of his efforts Kynaston and Babrow broke through and Charlton finished off the movement with a great try, which was not converted.

Following a brilliant run by Gartrell, King's retaliated and their threes carried the ball from one end of the field to the other—a score appeared certain, and after some hard scrummaging near the Guy's line, King's were awarded a penalty, but the kick fell short and van Steytler cleared.

After the interval, Guy's launched a series of attacks and their backs handled the greasy ball magnificently.

The forwards were excellent, and thanks to their efforts and some brilliant hooking by Osmond the backs were given plenty of chances.

Guy's quickly increased their lead, when Steytler dropped a neat goal from thirty yards' range.

After a short attack by King's which was repulsed, Babrow made an opening for Charlton, and the latter, side-stepping at least three opponents, broke away with Darke alongside. Unfortunately, his final pass went astray, but Guy's quickly recovered and eventually Kynaston cut through the defence, Gartrell backed up and finally scored a fine try near the corner flag.

Encouraged by this success Guy's continued confidently, and their play reached a very high standard. Most of their movements were carried out at a terrific pace and King's found it difficult to keep them out.

One of the best efforts came towards the end, when van Steytler and Babrow made a dazzling run through the centre and finally Gartrell outstripped the defence, swerved past the full-back and scored behind the posts, for Kynaston to add the goal-points.

A minute later Gartrell nearly scored again, but he put a foot in touch when he had a clear run in. However, from a line-out the ball travelled to Kynaston, who caught the defence on the wrong foot, and he was over the line for another try, which was not converted.

Team.—R. L. Skea; D. W. F. Charlton, L. Babrow (captain), R. U. F. Kynaston, P. C. Gartrell; J. van A. Steytler, C. Halamandres; J. P. Rochford, H. F. Osmond, P. A. Lane-Roberts, J. R. D. Williams, T. W. Renton, G. A. Albers, C. S. Darke.

1st XV Fixtures.

The following fixtures have been added to the list published in the last number of the *Gazette*.

Wed. Nov. 1. Cambridge University at Cambridge.
Sat. Dec. 2. Catford Bridge at Honor Oak Park.
Sat. Dec. 9. Bedford Lions at Honor Oak Park.
Sat. Dec. 16. Wasps at Honor Oak Park.

Hospital Information, etc.

Papers by Guy's Men

Layton, T. B. Treatment of inoperable abdominal wounds. *Lancet*, 1939, ii, 661.

Stamm, T. T. Ætiology and treatment of osteo-arthritis. *Ibid.*, 754.

King-Turner, G. E. A link between dental disease and carcinoma. *Dent. Mag. Oral Topics*, 1939, lvi, 779.

Briggs, P. J., R. C. S. Dick and Sir Arthur Hurst. Simple ulcer of the œsophagus and short œsophagus. *Proc. Roy. Soc. Med.*, 1939, xxxii, 1423 (Sect. Med.).

Simpson-Smith, A. Tumour of abdominal wall: for diagnosis. *Ibid.*, 1391 (Clin. Sect.).

Barber, H. W. Macular telangiectasia: Case for diagnosis. *Ibid.*, 1397 (Sect. Dermat.).

Marriages

CROOK—DYSON.—On Monday, September 4th, 1939, at Crookham Parish Church, near Aldershot, Anthony Crook to Robin M. B. Dyson.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

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THE death of Dr. Poulton, which occurred with great suddenness at Pembury a fortnight ago, seems easier to apprehend in the circumstances in which we now live than it would have been in peace-time. We at Guy's have all round us reminders of those days before the war, but every one is changed. The Colonnade at 2 p.m. no longer has its crowd of waiting firms, the Medical Wards contain strange engines of surgical treatment, and in the Out-Patient Hall are unwelcome and sinister notices. For us younger members of the community, therefore, though we recognise the tragic personal loss that Dr. Poulton's death has caused his friends, it is natural to see it against the background of that other loss that the Hospital has sustained—its identity as a healing and teaching unit.

What is incredible is that, as its functions will surely return to Guy's when the war is over, so will not Dr. Poulton. For he symbolised the spirit of the Voluntary Hospital, its kindliness and its industry, the disinterestedness of its work and the atmosphere of friendly rivalry in which that work was done. We need not pity him. He lived amid the love of his colleagues and the respect of his profession; he died in the manner that most doctors desire, with no cold gradations of decay. To those of us whose duty it may be in the future to reconstruct in a harder world the system of which he was so admirable an example, his memory will be of the utmost value.

CAUGHT in the toils of the E.M.S. one must learn official English. Official English is English used by Government officials for no reason we have ever been able to discover. It is meaningless but sounds pregnant with enormous importance. Here we expose to you the recipe. It is much simpler than it looks or sounds.

Take any simple sentence which means something and add as many of the following as you can: position that might arise, a likely probability, under suitable circumstances, it would appear that, the general view is, by and large, the long view, experience goes to show, the broad principle, express it in writing, in the last war, make acquaintance with the facts, explore all the possibilities, after careful and prolonged consideration, for the probable duration of hostilities, seek out the appropriate authorities, examine every avenue, etc., etc. shake up and stir the now overloaded sentence thoroughly till you are satisfied you cannot understand it, that it does not mean anything, but that it sounds good. Then write it or speak it.

Here is an example: *Q.*—"Give me a Spencer Wells, please." *A.*—"I don't know if there are any. Ask someone else." Treat *A.* as above and it can become:—

"It would appear that after much consideration and taking the long view the appropriate authority has explored all the avenues and has not been able so far as its information goes to see its way to giving an exact estimate of the supplies of Spencer Wells available for the duration of hostilities. If you consider that it is essential to the furtherance of your purpose in accordance with your experience in the last world catastrophe to insist on the broad principle of a sufficiency of Spencer Wells for all, then you should apply in writing after seeking out the appropriate authority."

If you can write like that you will attain high rank. If you can talk like that you will be pressed into the Ministry of Health or Parliament. As practice for these high honours we suggest you turn simple answers to the following questions into official English: 1. "Where is my salary?"

2. "When will there be an air-raid casualty?"
3. "What is the E.M.S.?"

WE announce with deep regret the death of Lieut.-Colonel Reynolds, M.C., R.A.M.C., as a result of enemy action upon the *S.S. Yorkshire*. He was the first Guy's man to die as a result of the present war. An appreciation by Professor Ryle appears on a later page.

FOR the first six weeks of the war, the 6th Queen's Regiment was billeted in the Imperial Hotel, opposite "The Grapes" in St. Thomas' Street. We played several cricket matches with them, and gave them a special performance of a "Starling's Revue." But it was not till they had gone that we learned that part of their duties was to protect us in the event of riots during air-raids, and that they had left behind them a donation of £11 15s. 0d.

ARTICLES occasionally reach us with no covering letter, or other indication as to their authorship. We would bring to the attention of contributors who wish to remain anonymous that there are difficulties in publishing their articles if they do not take the Editors into their confidence. Their wishes will always be respected in this matter, but a card or other form of identification is always useful and sometimes necessary.

OUR attention has been drawn by Dr. W. L. Neustatter, author of an article "The Psychology of Nazism," published in the last issue of the *Gazette*, that he is not, as was there stated, Physician in charge of Psychiatry for Sector X, but only responsible for Psychiatry within the inner group of hospitals of this sector.

We regret that this error has occurred, and wish to make it clear that Dr. Neustatter did not so describe himself.

Obituary

DR. E. P. POULTON

WE regret to announce the death of Dr. E. P. Poulton, Senior Physician to Guy's Hospital and Consulting Physician to the L.C.C. (Lewisham Hospital). Dr. Poulton had joined the E.M.S. and was posted to the Kent County Hospital at Pembury, near Tunbridge Wells. He appeared happier than many others who were thus transported and had entered with enthusiasm into the attempt to provide a small county hospital with all the facilities of a large teaching hospital; probably, indeed, he was working too hard. On October 17th, he seemed as usual and was full of energy, but he died suddenly in his sleep early the next morning.

Edward Palmer Poulton, the eldest son of Professor (now Sir Edward) Poulton, F.R.S., was born at Oxford on October 1st, 1883. Like most children in Oxford at that time, he went to the Dragon School under C. C. Lyanam and spent a happy four years there. In 1897 he went to Rugby, where he developed his bent for natural science, partly perhaps under the influence of his father's interests, and obtained the School Natural Science Exhibition.

In 1902 he went to Balliol College, Oxford, as Brackenbury Scholar in Natural Science. Although he never obtained anything like the unique position of his brother Ronald in the athletic and especially in the rugby world, he was above the average at most games, and at Oxford was in the University Hockey XI playing against Cambridge in 1905 and 1906; this must have made the chance discovery that he had heart disease all the more of a blow as it was the end of any real active part in games. He was rather longer at Oxford than most men reading medicine because he followed the First B.M. by reading Chemistry Finals, and this took longer than the more usual choice of Physiology Finals.

He came to Guy's Hospital for his clinical work in 1907 and qualified B.M., B.Ch. (Oxon.) in 1910. He became House Physician to Sir William Hale White and after these appointments obtained the Radcliffe Travelling Fellowship in 1911 and went to Germany with George Graham, where he worked on problems of metabolism, especially on diabetes and creatinin. On his return he became demonstrator of Physiology in 1912 and the next year Medical Registrar at Guy's Hospital, and obtained his D.M. (Oxon.) in 1913.

In 1911 he had married Elfrida, youngest daughter of the late Mr. Charles Maclean of Glenearn, Perthshire, and in due course had three sons and two daughters.

In 1914 he was appointed Assistant Physician to Guy's Hospital. In 1918, having been elected F.R.C.P. the year before, he gave the Goulstonian Lecture on Diabetes and Ketosis. His wide interest in all aspects of medical research was shown in another way in the same year, when he was instrumental, with members of his family, in

E. P. POULTON, D.M., F.R.C.P.

endowing the Hilda and Ronald Poulton Fellowship at Guy's Hospital, by which a Fellow or two students could continue to work at Guy's under the Medical Investigation Department.

This enthusiasm for research was perhaps his greatest and most abiding interest in medicine; it received recognition in his election as Beit Memorial Research Fellow in 1920 and by the award of the Radcliffe Prize of the University of Oxford in 1921. His main work on these lines started with the physiological problems of diabetes and ketosis. From 1920 to 1925 he was working continually on problems of dyspnœa in connection with the oxygen and carbon dioxide carriers in the blood and with the hydrogen ion concentration in the blood, and with the oxygen chamber which had been installed in Addison Ward at Guy's Hospital; and this was the forerunner of his great interest in the development of oxygen therapy and the use of oxygen tents in which he has become concerned since.

At the same time he was interested in the problems of pain in gastric ulcer and of sensation in the œsophagus, and carried out investigations on himself and others after the introduction of a balloon into the œsophagus which could be distended while the subject was under X-ray observation. The mechanical side of any investigation always made a great appeal to him, and much of his later work was concerned with the development of apparatus, *e.g.*, positive pressure machines and oxygen tents. Although at first they were often complicated in appearance, his oxygen tent in the final form it reached after incorporating many ideas of himself and of his chauffeur was a neat and beautiful piece of apparatus.

The introduction of insulin in 1922 brought back his interest in diabetes, and for a time he was exceptionally busy with private practice; and this led him to give up his country home at Woldingham and to settle down at 25, Upper Wimpole Street, where he remained until the recent war. His first publication on insulin treatment was in 1923, and he continued his work on this subject regularly since.

Apart from many papers, he has also written "Oxygen and Carbon-Dioxide Therapy" and "Diets and Recipes and Treatment of Diabetes and Obesity," and has been the Editor of the 12th to 15th editions of Taylor's "Practice of Medicine," the first of these in 1922. This is perhaps his greatest contribution to teaching, as this old textbook has been made a good practical guide and kept remarkably well up to date. He devoted a great deal of time and trouble to the preparation of each edition. In addition to his hospital work and writing he was a keen attender of meetings and spread his interests widely. For some years he has been Chairman of the Council of the International Society of Medical Hydrology, and in 1937 was President of the Physiological Section of the British Association, an unusual distinction for a practising physician. He visited India in 1937 in connection with the British Association, and even under such difficult conditions showed his interest in research; as he investigated the wet and dry bulb thermometer readings in various localities and also wrote on the wider question of the influence which various climates have on disease.

On the more personal side, there were many qualities which endeared him to his friends, especially his courage and enthusiasm, his simplicity and honesty, and his kindliness and gentleness. Although he had known about his heart being affected for 35 years and for 15 years must have been aware of the danger of dying suddenly, the writer never heard any complaint, and it was his wife rather than himself who had to try and see that he got some of the extra rest that was needed. His regular hospital duties, his research work and his books, and his many societies and meetings show how little he let his health stand in his way, and in these multifarious activities he never spared himself. In recent years he spent much time with the affairs of the League of Nations Union, of which he was a keen supporter.

Everyone liked Poulton, and even when they differed from him about some point of hospital policy they always realised that it was due to his enthusiasm for what he thought best and that there was no hidden or ulterior motive.

He will be much missed by all his colleagues and a large circle of friends and especially by his wife and five children. His eldest son has recently qualified as a doctor and is now a medical officer at Pembury, the second is in the Army, and the third a medical student.

J. M. H. C.

Brave heart, adventure on to find
The greater truth but half defined
While yet there was the ever-questing mind.

Yours was the fight unthought, untold, and victory too
Which now its heavenly counterpart anew
Shall see, while we remain, content to scan the earthly view.

Go forth, undying soul, yet loftier dreams there are
To dream, for him who has discerned afar
Of truth half seen, the morning-star.

E. M. D.

LIEUT-COL. W. L. E. REYNOLDS, M.C., R.A.M.C.

BEFORE a single army casualty was reported from the Front one Guy's man, and one of the best in his generation, lost his life through enemy action. Col. W. L. E. Reynolds was among those reported missing after the sinking of the *Yorkshire* by a U-boat in the Atlantic. Having served with distinction throughout the last war and in various capacities since, his valuable training and experience are thus, at the age of fifty, lost to the country before ever he was able to report for duty.

Reynolds joined the R.A.M.C. as a regular in 1914 very soon after qualifying. He served in France and was awarded the Military Cross. After the war he saw service in foreign stations and later at the War Office, where he became D.A.D.G.

He was educated at King's School, Canterbury, and entered the Medical School in 1907, when he and E. D. Scott and the writer of this note first became acquainted and shared digs together at Brockley. Reynolds was one of the kindest of men and much liked by all who knew him. He was the soul of honour. Quiet and unassuming, with a healthy, happy face, demeanour and outlook on life, a real charm of manner, and gifts of true courtliness and comradeship, he will leave, both among his Guy's and Army friends, memories of a wholly lovable personality and type. His precise and methodical ways and his tact and efficiency doubtless helped to secure for him the well-deserved staff appointments which came his way. Had he been spared there is little doubt that he would have risen to higher distinctions in the profession and calling of his choice and for a second time have contributed to the war-time organisation of the best military medical service in the world.

Those who were near and dear to him may feel assured of a very deep and genuine sympathy on the part of the large number of Guy's men who knew and loved him.

R.

Allergy and Some Eye Conditions

By O. G. Morgan, Esq., M.Ch., F.R.C.S.

IN this short paper I am confining my remarks to certain cases of œdema of the lids which are associated with the allergic state. I am not going to discuss conditions such as orbital cellulitis or tumours or the many other pathological conditions which result in œdema of the lids. I thought they might be interesting for several reasons, even though many of them are more related to dermatology than ophthalmology.

1. It is very common for patients to come to us complaining of puffiness of the eyelids and pigmentation under the lower lids which they associate with eye-strain in spite of all one can say to the contrary. I have often wondered why patients who are run down should so quickly develop such a condition, and more especially why such pigmentation should so rapidly disappear when the general condition improves.

2. We see many cases of marked sudden œdema of the lids—chiefly the upper one with no conjunctivitis, and which we send on to the dermatologist with very few, if any, ideas as to ætiology except that of the label—angioneurotic œdema.

3. Many cases come first to the ophthalmic surgeon who have an early eczematous dermatitis with swelling of the lids. In the early stages they may be mistaken for angioneurotic œdema. The ætiology in some of these cases is of great interest to us.

4. Many cases of œdema of the lids have been described in the journals or shown at meetings, and in reading the discussion it is noticeable that no definite diagnosis has been made and very little mention of allergy is found, and yet in most of them it is obvious that this condition was the underlying cause.

Very briefly the main features of allergy are as follows :—

The term "allergy" was first used by Von Pirquet to describe an altered reaction in man to foreign proteins. It indicated the state of hypersensitivity of the skin of people who had tubercle, which resulted in a localised reaction when tuberculin was injected intradermally. It has now been widened to include hypersensitivity to any foreign protein, and such conditions as hay fever, eczema, etc., are manifestations of this hypersensitivity.

The normal cell walls allow crystaloids to pass through them, but they are impermeable to colloids. Thus the intestinal mucosa will allow dextrose to pass through, but the proteins of the food must be broken down to their constituent amino-acids and carbohydrates before absorption

can take place. These constituent parts are then built up into the specific protein of the host.

If a protein is introduced by a route other than that of the normal alimentary mucosa, *i.e.*, by injection, the tissues have to deal with it as a foreign protein and produce antibodies, which are probably digestive ferments, in an effort to dispose of it. These foreign substances, which are capable of stimulating the production of antibodies, are called antigens and are all probably protein in nature.

After injection of an antigen, there is an interval of some ten days before antibodies appear in the system. When they do so the recipient is then in a state of active sensitisation. He can be passively sensitised by injection of a serum from a previously sensitised person, and again there is an interval, but only of 24 hours.

Immunity and allergy are allied conditions, and they are both protective. In both the antibodies react with and neutralise the antigen, but in the first the antibodies are found in the blood stream and the reaction takes place in it; in the second the antibodies are fixed in the tissues, especially the skin and allied tissues, and the reaction takes place in them. The antigen-antibody reaction results in the production of histamine; when this is liberated in the blood it is dealt with quickly and easily, but when in the tissues it causes marked changes, especially on the capillaries in the dermal layers.

Anaphylaxis, which is a severe reaction found in animals on a second injection of a substance which was harmless after the first injection, is almost certainly also an allergic condition.

I will now deal with some cases which have come my way and try to demonstrate their dependence on an allergic state.

A doctor came to me with both eyelids very œdematous, so much so that one eye was nearly closed. I could find nothing wrong with the eyes, but I noticed that the skin was a trifle red and scaly. He gave up work for a few days and the condition quickly subsided. A few weeks later the same thing happened, and the skin was obviously slightly moist, and I told him I was sure there was some local irritant. He could find none, but one day he was driving his car and the wind caused some lacrymation; he wiped his eyes with the back of his fur glove, and then it suddenly occurred to him that this was the factor. Sure enough, in an hour he had irritation and a mild eczema with marked œdema of the lids. In this case the epidermis of his eyelids—which, incidentally, is the part of the cutaneous system most easily sensitised—had become sensitised to some foreign protein in the fur, fixed antibodies were formed in the epidermis and dermis and the antigen-antibody reaction with liberation of histamine resulted in the eczema and swelling. He had incidentally used the gloves for two years before sensitisation occurred.

Another case was that of a man who developed a somewhat similar condition after driving his car. It was found that some artificial tortoiseshell glasses which he only used on these occasions were the exciting cause. In another patient an inner hatband on the forehead produced a dermatitis of the forehead with well-marked œdema of the lids. Other causes well known to everyone are hair-dyes, plants, perfumes, inhalants, face powder and atropin.

Snell in 1906 reported a case of a pork butcher who suddenly became sensitised to the Ascaris, which is a constant inhabitant of the intestines of the pig. After some of the fluid had spurted on to his face, it swelled up so that the lids could not be opened. This shows the marked sensitivity of the skin of the eyelids, as his hands must have been in contact with this secretion for years.

In this connection it is interesting to consider the action of these chemicals, because the antigen, as I stated in the beginning, is always protein. Waller in some experiments found that in cases of atropin irritation the skin elsewhere was not sensitive to the alkaloid by the patch test, but that the alkaloid combined with a nucleo-protein of the tears gave a positive reaction. This test has also been done in cases of iodine sensitivity, the iodine forming a combination with a skin protein. He also found that desensitisation could be obtained by using injections of the alkaloid and nucleo-protein combination in increasing doses.

Urticaria is an allergic response in the dermis as contrasted with eczema, which is a response in the epidermis. The sting of a nettle causes a weal which is in the deeper layers.

Angioneurotic œdema is a similar response in the subcutaneous tissues, and it is in the lax tissues such as the eyelids and scrotum that the fluid mobilisation shows itself most markedly, and so these cases so often come to us in the first instance. A young man of sixteen came to me with marked swelling of both eyelids of each eye. It was obviously a subcutaneous œdema and not a dermatitis. The lids were quite closed and could only be opened with lid retractors. The eyes were normal, but it seemed as if there was some proptosis and that eye movements were restricted. The condition slowly subsided—about 24 hours—leaving puffy lax skin for a few days longer. There was no history of a previous attack, but the rapidity of onset, slow but certain subsidence of the swelling without evidence of

inflammation led me to diagnose an allergic condition. On questioning him afterwards we found that he was subject to hay fever, and in fact had a mild rhinorrhœa during the attack of œdema. Unfortunately I did not examine him elsewhere, nor was his urine examined, but presumably there was general tissue fluid retention from some generalised antigen-antibody reaction.

A more recent case was that of a man of 42 who came up with an attack of severe œdema of the lids. It was again of the angioneurotic type with no eczematisation. The scrotum was somewhat œdematous, but there was no pitting of other parts. He gave a history of several mild attacks of the same type during the previous year. On going into his history he said he had always had migraine and that his attacks of this were associated with numbness of the side of the nose and tongue. About half-way through an attack which lasted about 24 hours he started a profuse rhinorrhœa and used many handkerchiefs before the fluid ceased to flow. This case is interesting as it opens up the question of migraine as an allergic condition. Fluid retention is characteristic of the allergic state, the clinical symptoms varying with its site—eczema when it is epidermal, urticaria when it is dermal, angioneurotic œdema when it is subcutaneous. The nasal mucous membranes are affected in hay fever, and so why not the meninges in migraine?

Migraine is a very prominent symptom in the family history of allergic patients, even if it is not so constant in the patients themselves. The attacks show a marked and characteristic periodicity. Cases of asthma when under treatment have developed migraine as a result of an overdose of a protein used for desensitisation. Migraine can often be produced by other physiological stimuli and also by food. I have a doctor patient who can give himself an attack at once by taking chocolate. There is the same liver derangement in migraine as is found in other allergic conditions as shown by the reduction of blood chloride and increase in amino-acids. After an attack there is the same diuresis from secretion of the retained fluid (my patient had rhinorrhœa and no marked diuresis).

Bacterial allergy, which is really the condition originally described by Von Pirquet, is now considered to be of very great importance, and many general conditions such as rheumatoid arthritis and local eye conditions such as some cases of iritis, iridocyclitis and sympathetic ophthalmia, are considered as possibly allergic in origin. It is presumed to act in the following way: A focus of infection produces an antigenic substance which circulates in the blood stream and tissues and stimulates the formation of antibodies, a further production of the antigen results—the antigen-antibody reaction—and as the ectodermal structures are more liable to have fixed tissue antibodies than other structures, the results are arthritic changes and skin changes.

An interesting case in this connection was a small child of two, who was admitted in 1931 in the condition shown in the photograph. The main points are :—

4-10-31. Lids swollen, shiny skin, temperature 99 present for three days. No œdema of scrotum or ankles. No fluid in abdomen. Urine, heart, etc., normal. No conjunctivitis.

14-10-31. Condition as before. Temperature 103. Tonsils enlarged and swollen.

3-11-31. Throat sore. Scarlet serum injected. Eyelids still closed.

28-11-31. Rigor, some fluid in knee joints.

5-12-31. Temperature still up. Legs œdematous. Acupuncture, fluid sterile, blood culture sterile.

6-1-32. Throat better. œdema in legs and joints less. Lids as before.

2-2-32. Temperature subnormal for first time. Eyelids beginning to open.

This case was never satisfactorily explained, but

it was possibly a condition of allergic fluid retention from a septic focus in the tonsils.

The interesting feature of this case, which I have never seen before, is that the lids remained as in the photo for four months without any perceptible alteration, *i.e.*, during the whole of the febrile course of the disease. Holmes Spicer reported in the transactions a case of a girl with prolonged hip disease of tuberculous origin who had a more or less permanent œdema of the lids of a somewhat similar nature.

An interesting feature of these cases of bacterial allergy is the alternation of the symptoms. I have seen cases with advanced arthritic changes and relapsing iritis or iridocyclitis. It is very frequently found that when the eye is inflamed the joints are much more comfortable, and *vice versa*. This is very typical of allergic conditions, a patient alternating between asthma, angioneurotic œdema and eczema, etc., but seldom having two at once.

There is another group of cases, mostly consisting of people who have an inherited tendency to allergic manifestations which show a marked fatigue of the endocrine sympathetic system. This may be the result of incomplete recovery from some febrile condition such as influenza, long-continued worry or unhappiness, or focal sepsis. Exhaustion of the endocrine sympathetic system produces an exacerbation of allergic symptoms in those predisposed to them. For this reason treatment with adrenaline and thyroid has been of value.

In these cases also a fresh acute infection often causes allergic symptoms to subside because this stimulates the adrenals and the thyroid, but the subsequent exhaustion of these glands leads to an aggravation later. A patient of mine who was described by Dr. Barber in a lecture at Oxford showed this condition to a marked degree. She had a chronic streptococcal infection for many years which had started in her throat and, in spite of removal of the tonsils, her throat was never clear of infection and there were repeated pyrexial attacks with subsequent exhaustion. She was also unhappily married and was generally in a condition of being "worn out." Whenever she had a pyrexial attack or an attack of exhaustion, her eyelids swelled up and on some occasions even showed signs of slight surface eczematisation. She once had an over-vigorous massage, which acted like an overdose of streptococcal vaccine, to which she was extremely sensitive, and her temperature went up and her eyelids became exceptionally œdematous.

This brings us to the consideration of those cases of pigmentation below the eyes in people who have been overdoing things or who have had a long illness.

I have been struck with the degree of darkness which can be produced by one or two "late nights." It seems impossible to imagine a true pigmentation which can be produced so rapidly and which can disappear after 24 hours of rest. The only explanation which has been given is that there is a diminution in the blood in the peripheral capillaries in fatigue or illness and the normal pigmentation present in the dermis shows up much more conspicuously and especially in the thin skin of the eyelids. The puffiness is partly due to some tissue fluid mobilisation and partly to loss of tone in the elastic fibres of the skin which is always found in fatigue.

I will now deal with a few points to show that the eye itself takes part in the general immunological reactions of the body though our knowledge of the subject is derived mainly from experimental work on animals. In 1908 it was shown by Nicolle and Abt that intraocular injection of foreign sera gave inflammatory reactions—iritis hypopyon in guinea-pigs which had already been sensitised 32 days previously with an intraperitoneal injection of the serum. Controls showed very little, if any, reaction. Later experiments by Von Szily showed cases of iridocyclitis as a part of a general reaction of an anaphylactic nature in sensitised animals. From these and many other experiments it seems certain that the eye is sensitised as part of a general sensitisation, that general sensitisation can take place by antigen absorbed from the eye after injection, that an ocular anaphylaxis can be produced experimentally, and that an ocular desensitisation is a probability.

Many observers have demonstrated the presence and concentration of antibodies in the aqueous, and Bruckner has shown that these are increased by paracentesis, which may explain improvement in cases of intraocular inflammation.

Some experiments on tubercle in guinea-pigs have brought out the fact that immunity and allergy are not the same. Guinea-pigs were vaccinated with tubercle bacilli of attenuated virulence; later tuberculin was injected into some of the animals to desensitise their allergic response, and it was shown that the desensitised animals which showed no allergic response were just as immune to the injection of virulent tubercle bacilli as the ones which were not desensitised after immunisation. It is therefore clear that immunity is due to some unknown factor which arises from the introduction of tubercle bacilli into the organism and is distinct from allergy, which is an independent sensitisation of the tissues resulting from the protein part of the bacillus. Immunity may be the condition in which the antibodies are free in the blood stream, and allergy in which they are fixed in the tissues.

Some interesting experiments have been done on cases of phlyctenular conjunctivitis. Weekers showed that phlyctenules can be produced by injection of tuberculin in patients sensitive to tuberculin, but other observers showed that they can also be produced by using horse serum in the same way. Two cases of phlyctenular conjunctivitis have been reported due to hypersensitivity to strawberries. It is therefore probable that phlyctenules are an allergic reaction of the conjunctiva and may be due to any protein, but that the majority are due to hypersensitivity to tuberculoprotein as they are found in children with glands in the neck and other signs of tuberculous foci, and usually also with a high tuberculin sensitivity.

In syphilis there is some evidence to show that ocular inflammations are often allergic. They occur in patients who have gummatous lesions and who are highly sensitive to the spirochæte, and some cases of I.K. are certainly not due to the presence of the spirochæte as they are made worse by the arsenical treatment and seem to settle down when this is discontinued. The question of the presence of the spirochæte in other cases of I.K. is one which has, I think, not yet been settled.

That many of the cases of conjunctivitis and iritis associated with a septic focus or gonococcal infection are allergic, is almost certainly true. There is a particular type of fiery red conjunctivitis with no discharge and extremely painful to touch or to washing out, even with saline, which I have seen associated with apical dental trouble and which clears up within a few hours of removal of the underlying cause. Those cases of acute conjunctival redness associated with the acute urethritis and described by Hudson are very similar and in neither of these conditions is any organism found on culture.

Experiments have been done with derivatives of pneumococci as the sensitising antigens and inflammatory reactions of the type described above have been produced in the eye by the use of nucleo-protein derived from pneumococci, but not from the protein-free extract.

Vernal conjunctivitis has many features which would put it into the category of allergic conditions—intense itching, vasomotor disturbances, lymphocytosis, eosinophilia, periodicity of the attacks, frequency in children and young adults, and hyperplasia of the affected tissues. It is also frequently associated with hay-fever and bronchial asthma.

It was first suggested by Elsching that sympathetic ophthalmia was an allergic manifestation. He suggested that injury to the exciting eye resulted in absorption of uveal pigment which sensitised the individual as a whole and especially the other eye. Further absorption of the antigen took place and resulted in allergic inflammation. The time lag of two to six weeks, absence of bacteria, recovery after removal of the injured eye after sympathetic inflammation had started, were all points in favour. It is unlikely that hypersensitivity can be produced to the host's own normal protein; so that it must be due to some abnormal protein produced by the action of inflammation following perforation on the normal uveal pigment. Experiments on animals by other observers support this view, but it is possible that there are other factors and that the hypersensitivity to uveal pigment which is certainly present in cases of sympathetic ophthalmia may be only a chance accompaniment of the disease.

Thoughts on Returning to Guy's

By T. B. Layton, Esq., D.S.O., M.S.

THE cessation, almost complete, of all medical practice since the outbreak of hostilities that one hears of on all sides, hospital and private, general and consultant, is probably the most important medical news of these weeks. It is of added interest in that it is an echo of what happened in 1914. There may be something to be learnt from this. We must remember that during the months of August and September one-half the profession is on holiday and the other half is not overworked. Even allowing for that, I think it bears out the experience of the old family doctor who said that as a result of half a century in practice he had come to the conclusion that fifty per cent. of all diseases were functional, and in the other half fifty per cent. of the symptoms were a functional overlay of the organic disease. I would go further and say, as I learnt from an old Indian cavalry brigadier, that of the organic remnant the most important part of the treatment is the mental part.

The Throat Department reopened yesterday, and the cases that I saw bore out these thoughts. The first was a young girl with epistaxis upon whom, from her behaviour when we put the speculum into her nose, the distress of the bleeding of the evening before had evidently had an effect quite out of proportion to the amount of blood lost or the seriousness of the lesion from a pathological standpoint. The next was a young

married woman with a lump behind her ear. At the age of nine she had had a mastoid operation on the other side; the assurance that she was not to go through another was a more important part of the treatment than teaching her a toilette of the meatus for attention to the small skin lesion that had led to the enlarged gland. The next was an infant with otitis media. I thought, at first, that the lady who held her was her grandmother; the fact that she was the only child of a woman well on in life was enough to account for the state of anxiety that had been transmitted to the child and which had resulted in a disturbance that was undue for the severity of the case.

Between the wars, medicine had been dealing with the problem of making sure that no organic lesion had been missed, to the exclusion of the problem as to how much illness of a mental nature we might produce thereby. Two of my old cases yesterday illustrate this. One was a young woman in whom we had stayed the progress of a deafness, I believe by removing her tonsils in which we had found an hæmolytic streptococcus. We were not likely to be giving her any hearing back, but she had what she called " catarrh," by which she meant she knew she had a throat. Now we were prolonging that complaint by keeping her attending in the Department and by further investigations such as antral lavage and radiography. Her nose and throat were as normal as anyone's can be said to be. She accepted the statement that, having stayed the progress of her deafness, we had done all we could and that she was not likely to get any hearing back; and with that and a Guy's slip on which were written the names of various lozenges that she could try for her "catarrh" she left the Department. The other was another young woman, whom we had been keeping in the Department for two months, after we had cured her symptoms, as she declared, by a septum operation, because someone had thought he had seen an antro-choanal polyp far back on one side. A letter to the doctor who had sent her up was more appropriate than radiography. To miss a choanal polyp may be bad surgery, to search unduly for one that is not there is bad doctoring. It is better to risk the surgeon's reputation than to tip a young woman over into chronic invalidism. I would suggest that the first lesson of this new war is to search for the mental factor in every case we see; but we must see that we do not let the pendulum swing too far.

What has happened in these weeks to acute surgical disease? I have had a cerebral abscess that I believe we have pulled through, an orbital cellulitis that I regret to say we have failed to save, and a little old gentleman with a doubtful ear that proved on opening the mastoid to be a true bill. Perhaps this is the normal for the time of year of cases in absolute need of operative surgery. But one case has made me wonder to what extent we manufacture acute surgical disease. It was a young lady, aged nineteen, with an otitis media of an influenzal origin which I felt pretty sure would come to operation, and I said: " Well, we must watch her carefully, and do the mastoid over the week-end if need be." And the house-surgeon replied: " Oh, sir, she is being sent home to-day! " At which I protested, but, it being September 2nd, realised that if I interdicted this she would be evacuated, and thought it would be better for us to watch her at her home, and so we saw her twice a week. She improved, but did not get well. There was still pulsation, and she remained deaf. We let her go to Eastbourne, where the throat lit up, and she returned with a painful inflammation of the naso-pharynx which alarmed me, for in the mucous membrane I could see a thin filmy membrane that I thought was streptococcal, but from which we cultivated a staphylococcus. I thought the mastoid was going to flare up into an alarming state, but did not like to operate in the presence of this pharyngitis. So we went on watching her and the back of the nose improved, but the ear still pulsated and there arose a swelling of the deep meatus which again I considered an ominous sign. I told her mother that unless the ear was well by six weeks from the date of discharge I should advise operation. I had in my own mind no hope of avoiding it, and wondered whether I was right to wait the extra ten days. And then she developed an enormous appetite, such as only the young healthy animal can acquire when recovering from acute disease. It frightened her mother, but, with my memory of 1918, I encouraged it, and on the day appointed for operation she was well, with the drum-head healed, the hearing normal, and the meatal swelling gone. Now, had there been no war I am sure that I should have operated on this young lady, and have thought that I was saving her hearing and possibly her life thereby. Now that we can with safety watch an ear case under the guidance of chemotherapy, the number of operations in the acute invasive stage will probably diminish, and this will result in some escaping it altogether.

To these thoughts I would add two warnings. Because we may not do so many mastoids in the invasive stage does not mean we shall do fewer mastoids in acute disease, but we shall do them in its period of repair. There is no dividing line between acute otitis media and mastoiditis and there is only one criterion of recovery in either—

a healed drum-head and normal hearing. Every case in which that does not occur is a failure. To put it in other words, every case of chronic otitis media is a surgical failure. I think the critical period is the end of the sixth week.

My other warning is that to my remarks about investigations there is at least one exception, and that is phthisis. Every member of our profession must be alive to the possibility of anyone coming under his charge or working under him falling a prey to this; and this warning is especially needed because the mental symptoms that overlay the organic lesion notoriously are present in this disease, and may be so strikingly apparent that they appear to be the whole disorder.

17-x-1939.

News from the Base

Pembury Letter

WE Pemburians consider ourselves lucky. To have a large hospital set in such rural environs is indeed fortunate, and, moreover, the buildings are of brick and steel, and we are not confronted with a conglomeration of huts inherited, purchased or pilfered by one authority from another. But buildings are a small part in hospital life, and if it were otherwise, Guy's, both ancient and modern, would have been less honoured. The moral is that the people, not the buildings, make a hospital. Excuse us then if we deal with people.

In the present circumstances the hospital staff is composed of aboriginals and emigrants, and at Pembury we have been lucky in that no friction has occurred between the two. This must be attributed largely to the charm and co-operation of those who were at Pembury before we came, and on our arrival we actually felt welcome rather than interlopers. Who, then, are these people to whom we are so grateful?

The Superintendent, Dr. Grasby, was at Guy's about the same time as Mr. Brock, and we believe he has warm feelings for his Alma Mater. In spite of his occasional chaff, we have noticed that the only picture in his office is of Guy's, and on the wall is a list of all the Guy's men who have worked at Pembury. The Residents, except for Poulton, are not from Guy's, but they have all done everything to make us feel at home. We are indeed grateful.

And now for other matters. Ivor Thomas has been doing yeoman service in the maternity wards, but we understand that a letter was recently sent from headquarters saying that, as his time was up, they wanted to know which service he desired to join. Thomas replied that he wanted to do obstetrics, and rumour has it that he will be drafted into the "Labour Corps." But to be serious, we feel that a grave mistake is being made with house-officers. They come and go with such rapidity that they don't have a chance to get settled. Moreover, a man is now made a full house-officer the moment he is qualified, and by the time he has learned something and is getting useful, he is pushed out to make way for even more underdone material. Guy's still has in its grips the last of the housemen, trained in its excellent peace-time tradition. Surely some of these men should be retained to act as guide and confessor to those who are coming on. Once the "Old Guard" have gone they cannot be replaced, and each generation of housemen will be less experienced than the last, till peace breaks out again.

Among the staff, we sincerely regret the sudden death of Dr. E. P. Poulton, and extend to Mrs. Poulton and her children our heartfelt sympathy. Dr. Cameron has recently joined us, and is welcomed by staff and student alike.

Lastly we have news which we hope will reach the ears of Drs. Lintott and Rink, whose knowledge of "Modern Medicine" was so delightfully expounded over lunch in the halcyon days of peace. We imported three leeches from London and applied them over a tender liver. Oh boy, did they suck? After they had nigh unto burst with their gory repast, Drew spent three hours staunching the bleeding. What price your sulphonamides now?

N. M. J.

Orpington Letter

THOUGH there still remain many things of which we complain, and complain vigorously; yet this week we are just a little pleased with Orpington "War Hospital." For step by step it is being transformed into a hospital. A little over a fortnight ago we were presented with seventeen patients and almost no apparatus, diagnostic or therapeutic, to use on them. We battled nobly with our stethoscopes and clinical judgments, and suddenly appreciated how much the advance in medicine has been due to the advance in diagnostic apparatus and how little to clinical sense.

In the last fortnight we have made strides. We have performed our first operations, applied our first plasters, taken our first X-rays, held our first

post-mortem, and given our first transfusions. We now have seventy patients (apart from the seven hundred infirm) to grace our beds. We have even a room where, with some comfort, the doctors can sit, read and eat their tea. There is even talk of " a medical mess in a fortnight."

The historic date is October 19th, when Mr. Kilpatrick, with skill and unorthodox instruments, drained an empyema by intercostal catheter, and so baptised the theatre. After this Dr. Scott could not be restrained from baptising one of his twin anæsthetic machines, and led Mr. Batchelor to an osteotomy of the femur. Mr. Bell, by violence or suggestion (he denies both) caused three of the seven hundred infirm to fracture themselves, and so had an excuse to plaster them. And now there is no stopping us from even the most terrifying of manœuvres.

Of unmedical interest we have plenty, though we have not yet attempted to rival the Starlings or the Farnborough Follies. Eight brand-new, spick and span huts have materialised as by magic, shortly to increase our beds by about three hundred. Biggin Hill provides us with afternoon aerobatics when the sun shines. For no reason but stubbornness the Ministry of Health have widened our entirely adequate road to twenty feet. Among our infirm one may talk with the man who rode in the Grand National and the man who bowled W. G. Grace, and admire our dispensary messenger " as barmy as a rattle." By night, when the sky is clear one may look at beauty—a huge harvest moon, stars, and the white trellis work of twenty searchlights.

E. B. R.

Farnborough Letter

FIRST of all may we say how glad we are to be back on the pay-roll. Every house officer has now received his cheque on account, the last to do so being Mr. Stafford-Clark, who had to resort to telephone conversation with the Ministry before gaining recognition; and as a result a somewhat rosier view is taken now of the E.M.S.

Heartened by this, we produced our first elaborately staged show down here a week or so ago. Aided by the prodigious labours of carpenter, electrician, the steward and many expert technicians, Mr. McLintock, as stage manager, provided us with an unimpeachable background. The nurses displayed divers talents to advantage, to provide most of the first half of the programme, which was completed by songs from Mrs. Garrett, our Steward's wife, and from a Viennese opera singer who, despite her talents, had been, like so many others, forced to abandon her country. Finally Messrs. J. V. MacLean (does he spell his name like Mr. K. S.? we wonder. We do hope so) and Burgess produced a tasteful Victorian comedy to close the first half. Outstanding among the performers in this was Mr. Gill as a jaded but still eager spinster with voracious expectations.

The second half of the show was largely provided by the housemen. They appeared first as nurses of inevitable beauty, grace and charm to sing and prattle artlessly. There followed some very expert conjuring by Mr. McFall, from which point the Residents had it all their own way. They certainly made the most of their opportunity to reappear at frequent intervals in different guises. Songs by Messrs. Price and Stafford-Clark, disgraceful innuendoes about all sorts of people, including, strangely enough, Dr. Leeming, remarkable acting by Mr. K. S. MacLean, and a burlesque of Frankie and Johnnie completed the show.

Speaking for the performers, we thoroughly enjoyed the whole thing. The audience have been kind enough to say much the same. Afterwards there was a certain amount of modest revelry and celebration among some of us. Some of us, too, went to bed earlier than others. Life is like that.

As far as our own work goes, there is as yet little further to describe. Some days ago the distant quavering of a siren drifted down to us on the wind. Smartly trotting to the reception ward came Mr. Price, house-surgeon on duty, smiling unassumingly and carrying his gas mask. Sister Gale, equally ready for anything, and no doubt fortified by the enormous box of chocolates she had won at the film show when Sister Queen had drawn the winning tickets in the raffle and plucked out Sister Gale's ticket at her first attempt, was there in charge.

Together she and Mr. Price discussed the advisability of filling all the hot-water bottles sent. Pending the sound of gunfire or the sight of flying fragments of this and that, they decided to compromise by simply heating up the water. Even as they acted upon this, again from afar came the siren's note—the " All Clear." At no point during this drama had our local siren deigned to give even as much as one toot. Strange mystery as it may be, it none the less proved the willingness and efficient preparedness of our personnel, we suppose.

We have a contemporary down here—the magazine of the hospital, which appears monthly. It is called " Service." After reading it we felt bound to confess that it might almost have been called " Charity," so generous was its welcome to us strangers within the gates. The welcome

absence of hostility and the presence of sincere co-operation, excellent as it is, is not the whole answer, however. The problems affecting the nurses remain acute. In point of fact, there can be no denying that the attempt to train two sets of nurses side by side in the same wards along two completely different lines is not succeeding, because it cannot succeed. And at the moment it is the Guy's training that is suffering. We can but hope that the authorities have in mind a rather more fundamental approach to this problem than they have as yet displayed.

In this connection, too, the talk of starting a Fracture Clinic is encouraging. This would have its own ward and theatre here, and would also run an out-patient department. The fact that it would be a complete unit in itself and would deal exclusively with fractures, a type of clinical material in which this hospital is rich, would enable the nursing staff allotted to it to be trained, at least while they were there, under the guidance of the Sister in charge, rather than along the lines of the rest of the hospital, where, as we have said, training is at present most unsatisfactory: unsatisfactory because while the difference between the two schools is undeniable and unavoidable, the distinction made is altogether inadequate.

But perhaps later we may be able to report progress on this as on all other fronts.

D. S. C.

Dartford Letter

WE feel that not only an apology but also a vindication is indicated for the absence of a Dartford letter in the last number of the *Gazette*. In truth, 'twas not due to fear of imparting information likely to be of service to an enemy, nor even to avoid exposure of our friends, but merely that we were too late for the press.

Though Nazism has not seriously interfered with us here as yet, we have had a fair measure of "internal trouble." First there was the shameful Ministerial document announcing the dismissal without pay of the junior Residents, which caused an outburst of fierce indignation, culminating in deputations to Sector H.Q., the B.M.A., and even the popular press. The rapid withdrawal of the insult, followed up by more than welcome cheques, served to quell the mutiny which was brewing.

The second horror that was thrust upon the medical staff came in the form of instructions to lecture to the nurses twice weekly at 9 a.m. Customary it may have been under the iron regime of the L.C.C., but there is still much muttering about exploitation in fields quite undreamt of when contracts were signed for medical duties in a war-time C.C.S.

Few who have not experienced it can realise the full torment of lecturing in the cold grey dawn to seventy tittering damsels on subjects with which the mind is no longer as intimate as in Dissecting Room days. Even this, however, has served to provide some amusement—especially the probationer who insisted that the mental foramen was the structure damaged in insanity!

At Joyce Green our duties have been increased by the arrival of a convoy of soldiers from a nearby military hospital. The majority are in a convalescent stage. Their reluctance to leave the ambulances that brought them we construed as a slight on our hospital—until we saw the W.A.T.S. that drove them!

From the Orchard we understand that senility and mass incontinence is taxing the industry and ingenuity of the nursing staff to the utmost. Nevertheless they seem to retain sufficient strength and *joie de vivre* to indulge in the vigorous frivolities arranged for them by the local League of Health and Beauty. We must confess that there seems to be plenty of each in evidence. No doubt much of it will be revealed, or disguised, on Hallowe'en, when the supreme authority has melted to the astounding extent of allowing a fancy dress dance.

Whatever this may bring forth, it cannot be more picturesque than a recent party given by the Cossacks, who after their appearance at Olympia Horse Show are residing near this hospital. Not only have they lent their horses to members of the mess on several occasions, but entertained them with trick-riding, knife-throwing, and enlivened the evening with Russian dances and songs to the strains of the balalaika.

Following the Nazi threat that the war would now start in earnest, there has been much measuring of heads for tin-hats, which, we are assured, can be had at reasonable price in Staffordshire. Hope is expressed that the hats will arrive before Hitler.

The thousands of square feet of glass with which our quarters are surrounded are still regarded with considerable mistrust, and a never-failing source of entertainment is discussing where one should go in an air-raid, always presuming one hears the warning. The main concern seems to be the avoiding of exposure, not so much to bombs as the wind which howls nightly over the marshes with increasing venom as the winter draws on. Thus those whose E.M.S. contracts expire in December comfort one another by muttering their favourite slogan—"Mud-holes to you!"

J. S. C.

Nursing News

Thoughts from Pembury

THE last twenty hardy beings have left the marquee. We left it in a hurry when the rains came in earnest two weeks ago. We slept happily enough buried in piles of Government blankets, our beds swathed in brand-new Government mackintoshes and umbrellas over our heads. But alas, when the first drops penetrated even that line of defence, we submitted reluctantly to evacuation once more. We sleep now in a ward with moderately comfortable beds and wide windows and a pleasant view, a bathroom close at hand, and even a fireplace, for which we fetch and carry our own wood. But we still wax sentimental over the marquee. Two weeks ago we were heroines, martyrs to a noble cause. Almost daily we had parcels of woolly clothes from agitated mothers and food from anxious relatives. People pitied us, admired us and thought us tough. We had excuses for everything, from unstarched caps and dirty shoes to continual unpunctuality. After all, we came from the marquee. Enough said. Now we are merely the people in F2, almost inmates of the Workhouse. We are installed in one of the many blocks comprising this place. There are Male Infirms, Female Infirms, Lower Hospitals, Upper Hospitals, Blocks A, B, C, D, E, and so on, all mysteriously united by passages and stairs. These, together with the ins and outs of an oddly-timed local bus service, no longer trouble us.

The transport question is nothing here. We are agreed that Kent is an excellent county for walking, cycling and, to be vulgar, hitch-hiking. We, too, are discovering remote villages, dreamy-eyed cows, autumn tints and rain-washed skies (particularly the rain-washed skies). We are also connoisseurs of cider. Some of us can now make enlightening statements on hops, tramps and apples. We eat a truly alarming amount of apples, which, according to the adage, should keep all doctors at bay for ever. We wish that they would help us to solve our weight problem, which prompts us to wonder if our fellow-evacuees are as troubled as we are with aprons whose careful pleats are ignored by the local laundry. We present a somewhat billowy appearance here, and (forgive us if we continue to be personal) we regret that our hair-styles are wilder and woollier than ever. No amount of hair-nets and devices can curb our literally wind-swept coiffures.

So much for ourselves. Of the combined activities of everyone here we can say enough. There is a general feeling that we must keep up some kind of cultural and social life among ourselves, stranded as we are. This is not difficult. So far we have had two concerts and two dances. The nurses have a sing-song once a week, and last night we listened to a very good programme by the Tunbridge Wells Male Voice Choir, who have promised another visit. Rehearsals are now under way for a big concert next week. We are looking forward to some cinema shows, and we shall produce a play later on. Some of us have ideas for a Nativity Play at Christmas. Last week a reading circle came into being, and there is a certain Secret Society (with a membership of two) which has commandeered a small plot of land and hopes to become the Guy's (Pembury Branch) Horticultural Society. To-day we have been challenged to a hockey match by one of the local girls' schools. This is our latest branch of activity.

So far as work is concerned, we have been fortunate enough to meet with a certain amount of tolerance, which, combined with the initiative of one or two here, has helped to surmount inevitable difficulties. Enforced inactivity, the uncertainty of the future, this sudden stop in our lives together have not made life easy, but with the spirit with which we have begun our work here we hope to carry on. We pay due tribute to those who are doing so much for us—and we are determined to make what we can of this very novel existence and, if necessary, prepare the way for those who will follow on.

Correspondence

The Biennial Dinner

To the Editor of the GAZETTE

SIR,—The Guy's Biennial Dinner will not be held on the 8th December, as previously planned. Arrangements for the Dinner will be reconsidered after the termination of the war.

Yours, etc.,

GEOFFREY MARSHALL,

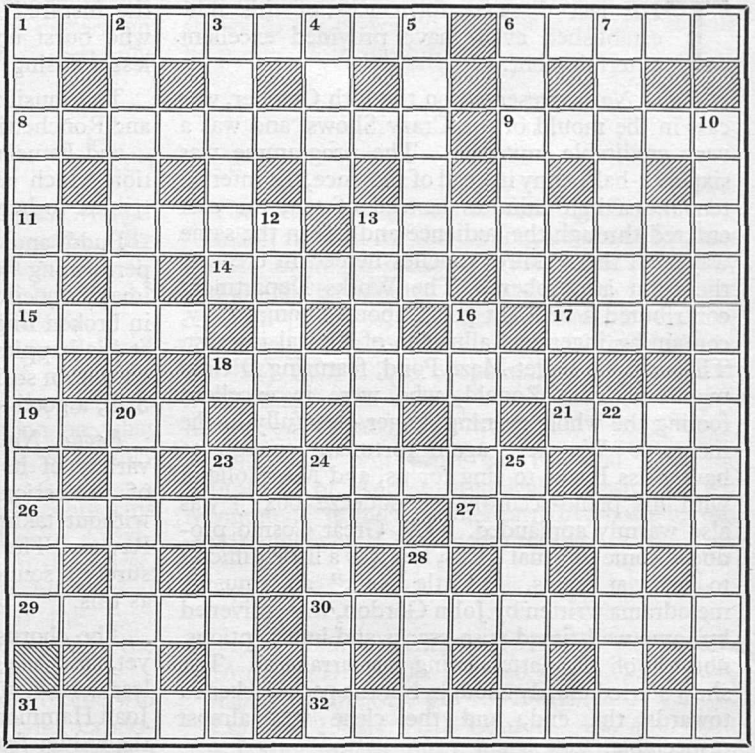
Hon. Sec.,

Guy's Biennial Dinner.

45, Wimpole Street,
W.1.

Crossword No. 7

By "Pepsin"



ACROSS

1. This drug apparently has rapid action at first.
6. Yes, he is a fool to try this estimation.
8. Lemon's sap. (Anag.)
9. Amputate?
11. Lizard has devoured a bird.
13. Don't forget about the limb!
14. No wonder his head spins, the drunkard.
15. Bring to naught.
17. Entangled edges, form network.
18. Dental filling?
19. Cunning part of the foot.
21. Sore remnant.
24. Skip in Dublin, but this at Oxford.
26. Oblique, although almost straight in the end.
27. (rev.) It sounds as if swearing at the cat has become a habit.
29. Missing in Adam.
30. Physician to take with you on honeymoon.
31. Bear.
32. Angina Pectoris?

DOWN

1. Yawning.
2. Nothing more than spherical, it is clear.
3. Flair for making money.
4. Sounds like very ordinary surgery.
5. Surgeon who introduced antisepsis.
6. Quickness of perception.
7. Unsteady gait feigned at first, but ending in easy pace.
10. This injury may also occur in September (2 words 5 and 8).
12. Bit left over in large vessel.
13. Expression of esteem.
16. Singular fact.
20. A rotter to declare a corpse.
22. A bag is the beginning of an amino-acid.
23. Summons to gather around given by word of mouth.
24. Scratch the men north of the border.
25. Part of false teeth (2 words 3 and 3).
28. Roman hip.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 31st October.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 6: A. Gordon-Taylor, St. Albans.

SOLUTION No. 6

Notes

ACROSS

26a. As-car-is.
31. Once thought due to foul air.
32. Ava+rice.
33. Pop-eye the Sailorman.

DOWN

7. 'Fat, fertile, fair and forty.'
17d. Bent back.

SOLUTION No. 6

■	■	H	E	A	L	T	H	R	E	S	O	R	T	■
F	■	E	■	R	■	E	■	U	■	C	■	H	■	T
A	M	A	L	G	A	M	■	G	L	A	D	E	Y	E
I	■	R	■	O	■	P	■	A	■	L	■	U	■	S
R	E	T	I	N	A	L	■	■	P	E	R	M	I	T
■	■	■	■	■	B	E	D	P	A	N	■	A	■	M
E	G	R	E	S	S	■	E	■	P	E	S	T	L	E
A	■	E	■	■	C	O	R	N	U	■	■	I	■	A
R	E	T	I	R	E	■	M	■	L	A	I	C	A	L
D	■	R	■	A	S	H	A	K	E	■	■	■	■	■
R	O	O	S	T	S	■	■	A	S	C	A	R	I	S
U	■	F	■	T	■	C	■	N	■	H	■	E	■	U
M	A	L	A	R	I	A	■	A	V	A	R	I	C	E
S	■	E	■	A	■	S	■	K	■	R	■	N	■	T
■	E	X	O	P	H	T	H	A	L	M	O	S	■	■

The Starlings' Revue

THE last three performances of this now established event have provided excellent entertainment.

Revue No. 5, presented on the 14th October, was cast in the mould of the Crazy Shows, and was a very creditable imitation. The programme was sixpence-halfpenny instead of sixpence, the interval ten and a half minutes instead of ten, the cast entered through the audience and left in the same way; all these skilful touches helped in creating the right atmosphere. The Works Department contributed a brilliant poem about Thomas Guy, containing ingenious allusions of topical interest. This and the Ballet Maze Pond, featuring O'Gorman and Tom Ronald, who were in excellent fooling the whole evening, linger gratefully in the memory. We were again fortunate enough to have Miss Evans to sing for us, and Mr. Holland with his piano-accordion (" squeeze box ") was also warmly applauded. The Great Cosmo produced some unusual tricks, but was a little difficult to hear at times. " Little Nell," an amusing melodrama written by John Gordon, was enlivened by some well-timed wise-cracks and interruptions, not all of the latter being pre-arranged. The show started crazily enough, but the pace slackened towards the end, and the close was almost respectable.

Revue No. 6, on October 21st, was a return to the normal genre. We had two distinguished visitors, Miss Pam Barton and Miss Teddy St. Dennis. Miss Barton has a delightfully natural stage personality, and kept us amused with stories, besides showing us how a club is swung by a golf champion and by a retired colonel.

Miss St. Dennis sang two of the songs which she has made famous—the " Lambeth Walk " and " Me and My Girl."

The three sketches, one of them written by the prolific John Gordon, were all good; perhaps the best was the one which revealed Jerry O'Gorman wrapped in an enormous overcoat which concealed only his underclothes. These sketches introduced for the first time outside talent for the female parts. We welcome Nuala Berry, Elaine Kirby and Lois Davis; they add glamour to our entertainments.

The Works Department again launched out with an original act in which there were some very funny rehearsed interruptions. The top-hatted gentleman who walked across the stage carrying a step-ladder in the middle of the song produced laughter lasting for several minutes, and the inspired comments of the programme-seller who burst upon us like a portent were scarcely less amusing.

The musical items this time were the Bockners and Ronchetti with their guitars—always favourites —and Pamela Waters crooning. The rapt attention which she commanded was a well-deserved tribute to her power of enthralling an audience.

Budd and Gordon appeared as trainers of a performing flea, which was made to perform an imaginary circuit of the audience. Budd, speaking in broken English (" I must 'ave 'ush ") is always at his happiest in these parts, but the act would have been still more effective if it had been shorter. Still, a good show.

Revue No. 7 was notable for the range and variety of its items. The increasing proportion of professional artists has raised the standard without taking away the topical character of the Revue. The policy of enlisting outside help is surely a sound one when it is exercised as wisely as this.

The chorus was the best-dressed we have seen yet, and the dancing gained in effect for being less ambitious than usual. The songs of Miss Joan Hammond and Mr. Norman Terry, especially their duet from " La Bohème," were a powerful reminder of the excellence of professional talent, and how much we owe to our visiting artistes.

The first sketch (" The Lift ") was poor and the ending weak, but the second more than compensated for it. In this, a family of spiritualistic inclinations attempted to cope with a mother possessed of a dog-spirit. As part of the treatment consisted in a mass imitation of dogs by the whole cast, the effect on the audience may be imagined. The role of the mother was ably played.

The Coffey brothers made a welcome reappearance as two Irish tramps armed with violins —or would " fiddles " be a better word? In addition to the usual native wood-notes wild which we have grown to like so much, they sang an excellent topical song of their own composition. They are to be congratulated on their ingenuity and wit.

Hedley Atkins and Brenda Perry maintained their high standard, although it was a pity that they should sing the same song twice within a month.

Perhaps the most delightful feature of the evening was Hélène. Her three French songs, sung very softly, had an indefinable charm,

derived partly from her own attractive personality, which completely captivated her audience.

The programme was wound up by Tubby Harold. Bald, rosy, plump, but nimble in his speech and gait, he had a Punch-like expression which in itself excited risibility. He is certainly a great little man.

We should like to thank Hubert Greenslade, at the piano, for his playing.

We cannot refrain from expressing our admiration of the consistently high standard of all the shows so far presented and our hope that it will be preserved in the future.

A. G. C. C.

Reviews

Histological Technique for Normal Tissues, Morbid Changes and the Identification of Parasites. By H. M. CARLETON and E. H. LEACH (in collaboration with F. HAYNES). Published by the Oxford University Press. *Price* 17*s.* 6*d.*

THE review on this book has been delayed for various reasons, not least of which has been the wish to test some of the methods before hastening to express an opinion on what is essentially a practical manual of laboratory technique.

It has been used by senior skilled technicians to obtain new methods and by juniors as a text-book to guide their faltering hands in their first, and sometimes unassisted, steps in histological methods. All are agreed that it is the most useful book of its kind, and it was returned to the reviewer with considerable reluctance.

The many tips on the use of the microtome will save the beginner hours of temper-trying experimentation, and the lucid instructions enabled a chemical assistant, who owing to the requirements of the war was called upon to cut sections, to produce very creditable results within a remarkably short period of time. The book contains in its 360 pages full instructions for section cutting, including such practical points as the honing and stropping of knives, staining, and the examination of parasites. It describes with adequate detail many special methods such as gelatin injections and the staining of nervous tissue. It does not claim to be an exhaustive compilation of all the various methods of fixation, staining, etc. The general principle appears to have been to give two or three well-tried methods for each purpose rather than a large number of doubtful reliability.

References are usually not given, and this, at least in some instances, is a pity. It is, however, better to follow this author's method in giving adequate details of methods in a book on technique rather than to suggest a method, giving no useful detail, but merely referring the reader to some inaccessible journal in Russian or Spanish, as is the case with certain other manuals. The omission of references is atoned for to some extent by the inclusion of a short bibliography at the end of the book.

The method of gelatin embedding, followed by formalin fixation for the demonstration of fat, etc. (p. 84), in frozen sections, gives beautiful results, and should be adopted more widely, not only for research purposes, but also in students' classes. The depigmentation of tissues containing melanin (p. 181) by the use of potassium chlorate and hydrochloric acid is simple and has been useful in the routine laboratory work.

This book will prove an essential piece of equipment of every histological laboratory. We recommend it most wholeheartedly, both to the routine histologist and to the research worker.

J. C. C.

Common Skin Diseases. By A. C. ROXBURGH, M.A., M.D., B.Ch. (Cantab.), F.R.C.P. Published by Messrs. H. K. Lewis & Co., Ltd., London, 1939. Fifth Edition. Pp. 450, with 179 Illustrations and 8 Plates in Colour. *Price* 15*s.*

THIS work is one of the well-known General Practitioner Series. There have been few changes in this edition apart from minor alterations and additions in the text and the inclusion of fourteen new illustrations. Written from the standpoint of the general practitioner, it deals only with the more common conditions which are likely to be encountered while differential diagnosis is considered in unusual detail. The methods of treatment which are advocated are those which can reasonably be considered to come within the scope of general practice, but passing reference is also made to special treatments which could be employed.

The excellent Index of Preliminary Diagnoses is retained and occupies the first eleven pages. Here, possible diagnoses are tabulated under the headings of principle lesions of an eruption. It is a most valuable section of the book, and must have given the first clue to many a harassed practitioner faced with a problem of diagnosis in the dark obscurity of Dermatology.

The first chapters consider in some detail the general principles of pathology, signs, diagnosis

and treatment in an endeavour " to get students to approach dermatology as a rational subject and not as a mere collection of hybrid Greek and Latin names." The sections that follow are well and clearly written so that a grasp of the subject can be quite easily obtained. Sections on Tuberculosis, Syphilis and Toxic Eruptions are especially good in that they give a simple and clear account of the various manifestations.

The work does not claim to be comprehensive, so that errors of omission need not be unduly criticised. As far as it goes the book gives a good introduction to the subject with concise descriptions of the pathology, symptoms and signs, frequent classifications and the more generally accepted opinions of ætiology. It does, however, tend to regard skin diseases as local lesions and not as outward manifestations of internal derangements, which in many cases they undoubtedly are. It is claimed that " Drugs by the mouth have a certain limited value in dermatology " ; vaccines gain grudging approval (it is not stated whether this opinion is based on experience with subcutaneous or intradermal administration, for there can be no doubt that the latter method is beneficial in certain conditions). Diet is a very much more important factor in many of the pathological conditions than Dr. Roxburgh suggests ; Seborrhœa, Acne, Rosacea and certain cases of Psoriasis can sometimes be improved by dietary corrections alone. The part played by Focal Sepsis is recognised, but no mention is made of this factor in Eczema and Psoriasis, although many of these cases rapidly respond to the removal of these foci. Endocrine treatment and sulphonamides are not given the credit they deserve, for there are definite indications of their value in treatment. Avitaminosis is briefly mentioned, but Vitamin K is omitted, and as this is an alleged skin vitamin it should have been included.

It is claimed that local treatment is by far the most important in eczema, whereas many would consider that hygiene and internal factors demand priority. Calcium is said to be of no value in the treatment of skin diseases, but this opinion will be widely challenged. Thus from the point of view of treatment it is clear that this book falls far short of a desirable standard ; even so, the descriptions and differential diagnoses coupled with the excellent illustrations ensure for it a wide degree of popularity. It is unfortunate that practitioners may be handicapped in proving the diagnoses to which they have been so clearly led by inadequate advice on the full and proper treatment of the case.

D. E.

Cæsarean Section—The Lower Segment Operation. By C. McINTOSH MARSHALL. Published by Messrs. John Wright & Son. Pp. 223. *Price* 21*s.*

A MAN who has performed 246 lower segment operations has every right to be considered an authority on the subject, particularly when this series has been performed without maternal mortality. Whether this justifies the publishing of a book on this limited subject is difficult to say.

From the point of view of the specialist the book is excellent in every way. It is well written and well illustrated.

Every aspect of the subject is covered, from history to technique, from anæsthesia to after-care. Here and there appear points with which many would disagree. But where this happens the reason for the author's choice is usually well made. In placenta prævia, for instance, the lower segment operation is strongly advised, chiefly to avoid the risk of sepsis, while the very real risk of hæmorrhage is rather minimised.

Again, the use of scalp forceps is recommended for delivery of the head. One has seen several cases of a bad slough on the infant's scalp from its use. The far less traumatic method of allowing the head to slide out of the incision over the surgeon's hand, following an injection of pitocin, receives scant mention.

These, however, are rather minor points. Sufficient to say that the book is of real interest to the specialist, but it is difficult to see how a book of this type can have any wider public.

H. A. H.

Electro-cardiograms—An Elementary Atlas for Students and Practitioners. By H. WALLACE JONES, M.D., M.Sc., F.R.C.P., and E. NOBLE CHAMBERLAIN, M.D., M.Sc., F.R.C.P. Published by Messrs. John Wright & Sons, Ltd. Pp. 56. *Price* 3*s.* 6*d.*

THIS is a handy-sized paper-covered booklet which, with little text and over fifty good illustrations (mainly reproductions of electrocardiograms), describes the elements of electrocardiography. The paper is fair, the type easy to read, and the illustrations excellent. The text is brief, perhaps sometimes a little too brief, but to the point. In most cases the brevity of the text is made up for by the fullness of the legends beneath the reproduced electro-cardiograms.

The first two chapters describe the electrocardiograph and the formation of the electro-

cardiogram. The descriptions are clear but rather condensed. The remaining five chapters describe the common types of abnormal electro-cardiogram. The chapter headings are Abnormal Rhythms, Heart-block, Coronary Thrombosis, Preponderance and Miscellaneous Records. In the chapter on Coronary Thrombosis the value of the chest leads iv R and iv F when thrombosis occurs at certain sites is shown.

This small atlas may be recommended for its good reproductions and concise text.

E. B. R.

Sport

Rugby

Guy's v. Bart.'s

AT Honor Oak Park on Saturday, October 21st, Guy's registered their fourth win in succession when they defeated Bart.'s by 7 placed goals, a dropped goal and a try (42 points) to 2 placed goals, a penalty goal and 3 tries (22 points).

Both sides played attractive open football, and there was never a dull moment throughout the game. At one time Guy's had the commanding lead of thirty points, but half-way through the second half Bart.'s rearranged their back division and staged a grand recovery, but, although they scored ten points without response, they failed to stay the pace, and towards the end Guy's were attacking strongly.

Skea, Gartrell and Rochford were unable to turn out and their places were taken by Lewis (from Cambridge), J. P. Crawford and M. R. Mullins, a front-row forward from Oxford University. Both newcomers created a very good impression, and in M. R. Mullins the Hospital have discovered an excellent place-kicker.

Bart.'s came quickly off the mark, and at the end of five minutes their backs carried out an excellent bout of passing which carried them to Guy's 25. Following a loose scrum, Berkeley, one of their forwards, dived over for a try, which was not converted. However, they did not retain the lead very long, for Guy's retaliated with a glorious movement, and Crawford just failed to reach the line. The ball was transferred from left to right until it reached Van Steytler who, finding himself unmarked in front of the posts, dropped a perfect goal. This success inspired Guy's to greater exertions, and a combined effort between backs and forwards ended in Coffey scoring a try, which Kynaston converted.

A little later Babrow broke through and, after a brilliant run, sent in Crawford for a try, but Bart.'s responded almost immediately with an unconverted try by Berkeley. At this stage, Guy's were dominating the scrums and obtained the ball repeatedly. Their backs carried out many spectacular movements, and for a time Bart.'s were kept on the defensive.

However, Guy's kept pegging away and eventually Babrow, who was in his best form, found another opening for Crawford, who touched down behind the posts for a try, which Kynaston converted.

Another dazzling movement between Van Steytler, Kynaston and Babrow produced one of the best tries of the season; Van Steytler finally scored and Kynaston added the goal points.

Bart.'s never gave up, and after the interval they soon reduced the deficit when first Hearn crossed for a try and McPherson followed almost immediately with a penalty goal.

These reverses put fresh life into Guy's, and after they had checked a massed attack by Bart.'s forwards, Halamandres sent out a perfect pass to Van Steytler, and again Babrow and Kynaston baffled their opponents with another movement which Crawford finished with a try in the corner.

Scarcely had the game been restarted when Guy's scored again. Mullins initiated a movement near his 25 and the ball was handled by nearly every member of the Guy's pack before Williams registered a try near the posts. On both occasions Kynaston added the goal points.

Guy's now carried all before them, and another grand forward rush led by Darke resulted in Coffey scoring a try, and this was followed by another magnificent effort by Babrow, who deceived the defence completely. Both tries were converted, the first by Kynaston, who kicked his sixth goal, and the second by Mullins from a difficult position near the touch-line.

Bart.'s then rearranged their back division and John Evans put fresh life into the attack. He quickly seized an opening, and after a glorious run from midfield he passed to Hearn, who scored, and McPherson added the goal points.

Brilliant handling by the Bart.'s threes ended

in another try, and this time Hall touched down for McPherson to kick another goal.

Bart.'s were playing strongly, but they left their effort too late and just before the end Guy's rallied and were pressing hard when the whistle sounded " no side."

Team.—Lewis; D. H. T. Charlton, R. U. F. Kynaston, L. Babrow (captain), J. P. Crawford; J. van A. Steytler, C. Halamandres; P. A. Lane-Roberts, H. F. Osmond, M. R. Mullins, L. C. Bustrode, J. R. D. Williams, C. S. Darke, B. V. Coffey, G. A. Albers.

Hospital Information, etc.

Pass List

UNIVERSITY OF CAMBRIDGE.

QUALIFYING EXAMINATION IN ANATOMY FOR MEDICAL AND SURGICAL DEGREES.

October, 1939.

W. H. Petty.

EXAMINATION IN PHARMACOLOGY FOR MEDICAL AND SURGICAL DEGREES.

October, 1939.

B. G. C. Ackner
D. W. F. Charlton
M. C. Cross
J. G. Goodhart
W. H. Petty
E. C. Poulton
A. E. Thomas

CONJOINT EXAMINATION.

September-October, 1939.

Medicine.

R. H. Bhanji
*O. B. Brears
*A. R. Bradley
*H. P. Brown
*A. E. J. Etheridge
*I. S. Eve
*C. Halamandres
F. M. Hayes
B. Leibel
*J. G. Mathewson
M. C. Mundle
*E. J. A. Needham
*R. C. Ponder
*L. G. Scott
*D. R. C. Willcox
*C. W. Wilson

Surgery.

*A. Bloom
*A. R. Bradley
W. E. R. Budd
G. H. D. Channing
*E. R. Davies
D. M. Douglas
*A. E. J. Etheridge
*C. Halamandres
D. A. Hamilton
*S. W. Hinds
*J. C. Houston
F. L. Ingram
*J. Lynch
W. B. D. Maile
R. Moore
*D. A. Osborn
K. O. Rawlings
B. C. M. Reed
*F. W. B. Rilstone
*H. A. Rowley
*A. E. A. Shaw
*L. E. Smith
J. V. A. Steytler
T. C. Thorne
J. A. E. Watts
*W. R. D. Wiggins
*J. N. Williams
J. Wills
*D. R. C. Willcox
*C. W. Wilson
*J. A. Yates

Midwifery.

O. H. E. Bayles
W. E. R. Budd
D. W. Burnford
G. H. G. Chase
R. B. Clayton
B. U. Coffey
P. R. Cooper
A. G. C. Cox
J. P. Crawford
*E. R. Davies
O. C. Fung
F. L. Ingram
B. Leibel
N. W. R. Lucas
J. A. MacDonald
G. O'Gorman
A. Pearce
E. R. Roseveare
*H. A. Rowley
A. F. Rushforth
G. T. G. Thomas
F. S. W. Shute
J. Gordon
H. P. Guerrier
F. M. Hayes
D. S. Hayton-Williams
*S. W. Hinds
D. G. Horan
*J. C. Houston
R. P. Strang
J. F. Swan
W. F. J. Weston
J. H. Wildman
J. R. D. Williams
*C. W. Wilson

* Have completed the examination.

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

October, 1939.

Surgery.

*W. R. Dyke
E. F. Gleadow
*G. L. L. Reynolds
J. A. Sutton

Medicine.

*W. R. Dyke
*W. E. Roden
*H. F. Sparling
E. A. Spouse
*W. N. Vellacott
*C. E. Winterstein

Forensic Medicine.

*W. R. Dyke
*W. E. Roden
*H. F. Sparling
E. A. Spouse
*W. N. Vellacott
*C. E. Winterstein

Midwifery.

T. A. H. Adkins
*M. E. Davies
*W. R. Dyke
G. E. H. Enderby
P. Haden
H. A. Kreiser

* Have completed the examination.

Changes of Address

E. Clayton-Jones, M.B. (Camb.), " Liscar," High Street, Amersham, Bucks., and *The Lancet* Editorial Office, 26, Temple Street, Aylesbury, Bucks.

Flying Officer C. V. Kark, R.A.F. (D.), V.R.

Lt. C. S. Pitt, R.A.M.C., c/o Glyn, Mills & Co., Kirkland House, S.W.1.

Marriages

WALLACE—ROBARTS.—On Saturday, September 30th, 1939, at Epsom, Lionel John Wallace to Maureen Winefride Robarts.

Deaths

McLACHLAN.—On October 23rd, 1939, at his home in Claremont, Cape Town, Arthur Ronald McLachlan, F.R.C.S.

ROWELL.—On October 27th, 1939, at a London Nursing Home, Minnie Ellis Rowell.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

DURING these ten weeks of war, institutions all over the country have had to adapt themselves to the curious circumstances of Peace-in-War, in which at present we all live; and the ease with which they have done so is no doubt in inverse proportion to the degree to which their war-time duties are specialised. The voluntary hospitals are no exception to this rule, and the members of the Emergency Medical Service now stationed at Guy's have, in the absence of Air-raids, the obvious duty of maintaining (and reconstructing where necessary) the normal functions of the Hospital.

This process of adaptation seems now to be almost complete, for it is possible to say that the Hospital is fulfilling adequately all the functions that the present state of affairs demands of it. Outpatients are seen as frequently as their occurrence requires, and only a few of the special clinics are not yet open. In the wards, a separation of Medical from Surgical cases has only recently been made, but the House-Officers in charge of them have still the unique experience of being H.P. and H.S. at one and the same time, with the opportunity of dealing with gynæcological cases as well. Indeed the House-Officers here for the first three months of war have had experience that both their predecessors and their successors will envy.

But though we are at present working in peaceful conditions, we do not forget that we are at war, and we are aware that if these conditions persist for much longer we shall run the risk of losing our adaptability. It is clear that beyond a certain point our peaceful and Emergency duties are incompatible, and in the absence of air-raids the former will tend to be developed at the expense of the latter. Then, when the bombs do fall, we shall be in the position that our "mobilisation" in September was designed to prevent.

ON another page we publish a letter from the Secretary of the Clubs' Union Council, in which he makes known a number of decisions arrived at by the Council at their last meeting. The most important is that students will be invited to pay to the Union a subscription of four guineas per annum.

There are about 700 students in the sector, 500 Medical and 200 Dental. 160 students are posted to Guy's by the Medical School and of these 78 are enrolled in the Emergency Medical Service, and get their board and lodging free. It is intended that every student in the Clinical Period should spend at least six months of his time at Guy's.

In an ordinary year the outlay of the Clubs' Union is about £4,000. Although in war-time this expenditure will be drastically cut down, the necessity of organising games and comforts for the students in disseminated units throughout the sector, is bound to add new expenses. An outlay of £3,000 in present conditions has therefore been budgeted for, and it is hoped that the subscription of 4 guineas will cover this. It is obviously impossible to forecast with any accuracy the total expense of this new system. What is certain is that the more students respond to this invitation, the more can the Clubs' Union work in their interests.

IT is with great regret that we observe the death of Dr. A. P. Beddard, Consulting Physician to Guy's Hospital. An obituary will appear in the next number of the *Gazette*.

Obituary

MINNIE ELLIS ROWELL

BY the death of Minnie Ellis Rowell which took place at 46 Beaumont Street on Friday, October 27th, 1939, Guy's has lost one of its most distinguished nurses of the old School.

Miss Rowell trained at Guy's Hospital from 1895 to 1898. She held the Guy's Silver Medal and the South African War Medal.

At the outbreak of the South African War, Miss Rowell joined the Army Nursing Service Reserve, and served Overseas with the Imperial Yeomanry, at one time having charge of a section of the Dielfonteen Hospital. On her return to England, she took a midwifery training and subsequently joined the Registered Nurses' Co-Operation, and practised private nursing for some years. But her progressive spirit urged her on —she was always of an independent and courageous nature—and in 1908 she took over and reconstructed internally, to suit her needs, the Nursing Home at 46 Beaumont Street which she successfully carried on for 31 years, becoming ultimately the oldest inhabitant in that street.

She took the keenest interest in all the doings of her neighbourhood; was Lady Superintendent of V.A.D.'s in Marylebone for over 13 years; gave useful practical support to the Local Charities and was a Vice President of the League of Mercy for the Borough.

She never lost interest in her beloved Hospital. No Fete or special appeal went by without receiving not only her monetary support, but, in the case of a Fete, bundles of goods for the various stalls, collected through the enthusiasm which she inspired in her Nursing Staff, her domestics and all her friends.

Miss Rowell was a personal friend of many of the Guy's staff, and kept in touch with large numbers of old Guy's men. She rarely missed attending any Memorial Service in the Hospital Chapel. Every year she attended the Nurses' League dinner and meeting, and she liked to propose a vote of thanks and so get a chance to say a little word about the Nursing School she loved. Her countless kindnesses to less fortunate members of the Nursing profession whom she assisted in sickness or distress, or took into her home, will keep her memory alive in their hearts.

The funeral service was held on Thursday, 31st October, at St. Peter's, Vere Street, and was conducted by the Vicar, the Rev. R. S. Lound, assisted by the Rev. S. H. Jarrett, Vicar of St. Pauls, Old Brentford. A large number of friends and members of the Medical profession attended and there were about 100 beautiful floral tributes.

So closed the life of a splendid daughter of Guy's who, though she received, also freely gave.

E. P. MacM.

Poaching

A Clinical Lecture by Sir Arthur Hurst D.M., F.R.C.P.

GENTLEMEN,—I originally intended to lecture to-day on "1901 and All That," but on second thoughts this appeared to resemble too closely a funeral oration, so I looked round for a more cheerful subject. In the last thirty-three years I must have delivered something like 180 clinical lectures on medical subjects. It seemed a good idea to devote my last clinical lecture to poaching on other people's preserves and to talk about some of the things that have interested me in surgery, obstetrics, and the medical and surgical specialties.

OBSTETRICS

"*Pernicious*" *vomiting of pregnancy*.—The morning sickness of the early weeks of pregnancy is so common that it may be regarded as physiological. In about one case per thousand it occurs after every meal and between meals and persists longer than the usual six or eight weeks. It is then commonly referred to as "the pernicious vomiting of pregnancy." Twenty-five years ago I came to the conclusion that this condition is always hysterical, and being hysterical should always be curable by psychotherapy. I was told at that time by obstetricians that they recognised a nervous form, but that in other cases the symptoms and the chemical changes in the urine pointed conclusively to a toxic origin. The symptoms and chemical signs could, however, be equally well explained as the result of starvation and dehydration, and I was able to demonstrate in several cases that they disappeared very rapidly with successful psychotherapy. A striking case

of this kind was a young woman of thirty-two who became pregnant for the first time in December, 1919. Three weeks later she began to vomit not only after meals but at all times of the day. As all treatment failed to help her, her abdomen was explored at a provincial hospital, but nothing abnormal was found. She continued to vomit until her admission into Guy's on March 7th, 1920. She was very emaciated, her skin was dry and inelastic, her tongue dry and covered with a black fur. Her pulse was weak, the rate varying between 120 and 136. She vomited everything, fluid as well as solid, and had continued to vomit even when given saline solution by rectum and nothing by mouth. Her urine contained a large quantity of diacetic acid, but no albumen or sugar. The ammonia index (*i.e.*, the percentage of N present in the urine as NH_3) had risen from the normal maximum of 5 to 28; Whitridge Williams had recently stated that an index above 10 indicated with certainty that the condition was toxic and not "nervous" in origin. She told me that when she began to vomit early in pregnancy her father had said to her: "You will have a bad time of it, as your mother vomited all the time she was carrying you." I explained to her that she had continued to vomit after the first six weeks because her father had put the idea in her head when he had told her about her mother. We talked about her illness for ten minutes, at the end of which I had succeeded in convincing her that she would not vomit again. I returned to her at 4 p.m. and watched her eat some buttered toast and tea which she had chosen for her first meal. She felt no inclination to vomit. She had a good supper under the eye of my house-physician, but he telephoned next morning that she had vomited her breakfast. I told him to get her transferred from the obstetric ward to the more favourable psychological atmosphere of Mary, where she enjoyed a dinner of steak, vegetables and pudding without vomiting. She gained 16 lb. in the next month, there was no recurrence of vomiting, and a healthy baby was born at full term.

In some cases albumen and casts have appeared in the urine and in another the patient became jaundiced, but the urinary changes were apparently due to subacute renal necrosis and the jaundice to subacute hepatic necrosis, both the result of starvation and dehydration, as both disappeared within a few days when the patient was persuaded to take a normal diet without vomiting. I think that most obstetricians now agree that pernicious vomiting of pregnancy is always hysterical and never toxic in origin, and that simple psychotherapy has completely done away with the necessity for the artificial termination of pregnancy. But it is disappointing to find that in the ten years from 1927 to 1938 an average of forty-eight women died in England from "pernicious vomiting of pregnancy" compared with an average of thirty-six in the preceding ten years.

ANÆSTHETICS

Delayed avertin poisoning.—Occasionally a patient who has undergone an abdominal operation dies two or three days later, although *post mortem* no obvious cause of death can be found. Death in these cases is commonly ascribed to "shock," but I believe in many instances delayed anæsthetic poisoning is the true explanation, though such cases are rarely, if ever, included in statistics on deaths from anæsthetics. It is not sufficiently realised that avertin and other basal anæsthetics as well as chloroform, and to a less extent ether, are liver poisons. Their toxic action is insufficient to have any obvious ill-effect in individuals with healthy livers, but if some generalised hepatic disease is present a comparatively small dose of the anæsthetic will act as a dangerous poison on the abnormally vulnerable liver cells. It is for this reason that operations performed on patients suffering from jaundice caused by toxic or infective "hepatitis" erroneously diagnosed as obstructive are almost invariably fatal. I have seen death in coma follow two days after cholecystenterostomy performed on a patient with obstructive jaundice caused by chronic pancreatitis; though it was ascribed to shock, I have no doubt it was really due to delayed avertin poisoning, as obstruction of the common bile duct leads to progressive degeneration of the liver, which manifests itself in the gradual change from a normal to an increasingly abnormal response to the lævulose test. Alcoholic patients are bad subjects for operation; not the least important cause of this is the pre-cirrhotic chronic hepatosis which may be present without any obvious signs or symptoms.

The moral to be drawn from this is that neither avertin nor any other anæsthesia, which is even mildly toxic to the liver, should be used for jaundiced or alcoholic patients or patients who give a history of having been jaundiced during the preceding year. In other cases, if there is any doubt as to the condition of the liver, the lævulose test should be performed, and if the combined rise in the blood sugar above the fasting level one and two hours after taking 50 grms. of lævulose exceeds 25 mgrs. the liver should be regarded as abnormally vulnerable. A positive indirect van den Burgh reaction with or without obvious jaundice has the same significance.

SURGERY

I have always enjoyed poaching in surgery. When Lord Moynihan gave the opening address to the Medical School in 1930 he spoke on " The Future of Medicine,"[1] so I chose " The Future of Surgery "[2] for the subject of my next clinical lecture. The story I wish to tell to-day begins with the poaching by a surgeon in what had hitherto been always regarded as the physician's province. When I was a student, " acid dyspepsia " was a common diagnosis at Out-Patients, and duodenal ulcer had never been diagnosed in London except as a possible alternative to gastric ulcer when perforation or hæmorrhage occurred. About that time Moynihan, a Leeds surgeon, began to operate for intractable indigestion, and he made the extremely important discovery that when a patient had " hunger-pain " coming on two or three hours after meals, which was relieved by food and alkalis and often woke him in the night, especially when the pain occurred in attacks with intervals of more or less complete freedom, he was not suffering from a functional disorder such as acid dyspepsia, but from a duodenal ulcer. Nobody in London believed him, but as I wanted to judge the matter for myself I visited him in Leeds in 1908. This was the first visit he had had from a London physician or surgeon, although I found many provincial and American surgeons watching his operations. He collected eight cases for me and I obtained their histories and examined them before the operation. He had suggested that the delayed pain was caused by reflex pylorospasm preventing the acid food from gaining access to the ulcer, but I x-rayed some of the cases and found that food left the stomach rapidly and the pain developed only when it was almost empty. The next two days Moynihan operated, and in seven of the eight cases he demonstrated a duodenal ulcer. I returned to London convinced that he had correctly described the clinical picture of duodenal ulcer, and I related what I had learnt in my next clinical lecture. Though I did not myself think that he had proved that gastro-jejunostomy was the only way in which the ulcer could be cured, Moynihan's teaching soon became so popular that most patients were sent direct to a surgeon for operation without any attempt at medical treatment. It is remarkable that nearly twenty years elapsed before it was realised that the treatment of uncomplicated ulcer is a medical and not a surgical problem. Many surgeons have now become convinced that gastro-jejunostomy is a thoroughly bad operation except for pyloric obstruction, and on the Continent and in America it has been to a great extent replaced by partial gastrectomy, and for a short time the latter showed signs of becoming the operation of choice at Guy's. But whereas it required twenty years to discover what an unsatisfactory operation gastro-jejunostomy is for uncomplicated duodenal ulcer, it is already obvious that partial gastrectomy is even less satisfactory. In about 50 per cent. of cases achlorhydria follows and the patient is likely to remain free from further trouble, but in the other 50 per cent. the acidity is often almost as high as ever and the danger of anastomotic inflammation and ulceration is very great.

Anastomotic ulcers generally heal after very prolonged medical treatment, but when they fail to do so, if the primary operation was a gastro-jejunostomy, the parts can be restored to their original anatomy or a partial gastrectomy can be performed. But if the anatomotic ulcer is a sequel of partial gastrectomy, no operation short of removal of all that remains of the stomach can be of any use. This operation is obviously one of great difficulty, but it was successfully performed three years ago by Mr. Gaymer Jones on a patient of mine who had been operated upon three times for a perforated ulcer and had developed a huge jejunal ulcer after a large partial gastrectomy for jejunal ulcer. The only way in which the patient now differs from a normal individual is that he does not get a pleasant warm glow in the epigastrium after drinking a liqueur![3]

Partial gastrectomy gives good results with gastric ulcer, but it is very rarely required, as gastric ulcers, however large and however deeply penetrating they may be, almost always get well with medical treatment if sufficiently prolonged. The comparatively rare pre-pyloric ulcer requires operation more frequently, as it has a much greater tendency to become malignant than a lesser curvature ulcer and the early stages of malignant degeneration are very difficult to recognise. If great improvement does not occur in three weeks, partial gastrectomy should therefore be performed.

Duodenal ulcer is less amenable to medical treatment, but the majority of patients get well and remain well if there is no obstruction. If the ulcer does not heal in two months or if recurrence takes place in spite of keeping strictly to an adequate post-ulcer regime, a gastro-jejunostomy should be performed if there is any delay in evacuation. If there is no delay in evacuation medical treatment should be given a much longer trial, and only when it has repeatedly failed should surgery be advised, but I really do not know which is more likely to give a satisfactory result—gastro-jejunostomy or partial gastrectomy. In any case the operation is only half the battle. The patient should be kept on the strictest ulcer

treatment after the operation until occult blood disappears from the stools; this generally takes four to six weeks. And after that he must keep permanently to the post-ulcer regime unless a test-meal (which should always be given before he is discharged) shows he has complete achlorhydria. Clearly the discussion of the surgery of ulcers by a physician is not poaching; what is needed is the constant friendly co-operation of the physician with the surgeon.

NEUROLOGY

Subacute combined degeneration of the cord.—Coming to neurology, I can plead that I am not really poaching, as I was the first physician in charge of the Neurological Department at Guy's and I remained in charge until the war, though I can well believe that I had little justification in regarding myself as a neurologist.

The introduction of the fractional test-meal to England by the work of Ryle and Bennett at Guy's in 1920 drew renewed attention to the constant presence of schlorhydria in Addison's anæmia. Sir William Hale-White had long before described the neurological symptoms which are occasionally present in this disease, but nobody believed that they had any connection with subacute combined degeneration of the spinal cord, which was first described by a group of neurologists at the National Hospital. They had noticed that the disease was often accompanied by anæmia, but had stated that this was not of the pernicious type. It occurred to me in 1922 that it would be of interest to give test-meals to patients with subacute combined degeneration, and J. R. Bell of Melbourne, who was working here at the time, extended the observations to cases at the National Hospital. We found that without exception achlorhydria was present, in contrast with the normal test-meals of patients with disseminated sclerosis and tabes, and further investigations by the methods recently introduced by Price Jones showed that their anæmia was after all of the genuine Addisonian type. It was thus proved that Addison's anæmia and subacute combined degeneration of the spinal cord were two allied diseases associated with achlorhydria. A few years later Minot's work proved how both could be cured by liver, and shortly afterwards Castle explained the true significance of the achlorhydria.

Treatment of paralysis agitans and post encephalitic parkinsonism.—Before the war I was interested in the treatment of paralysis agitans with hyoscine. I had found that though partial relief of the tremor could be obtained with hyoscine, it was impossible to increase the dose as much as one would like owing to excessive dryness of the mouth and paralysis of accommodation. By giving pilocarpine with it I found that these two unpleasant effects could be prevented without diminishing its action on the tremor, so that the dose could be greatly increased. When after the war cases of post-encephalitic parkinsonism became increasingly common, stramonium was found to be very effective in diminishing the regidity, but the dose was limited in the same way as that of hyoscine in paralysis agitans. It is now known that hyoscine, atropine and stramonium are about equally effective in both disorders, and the addition of pilocarpine makes it possible to increase the dose and so to control the tremor and rigidity more effectively.

DERMATOLOGY

Treatment of light sensitisation.—Dermatology has always been a closed book to me, but I had an interesting experience with a very intractable skin condition a few years ago. A woman of 54, who had always enjoyed good health except for an attack of migraine, developed a red patch on each cheek whilst sitting in the sun one day in March, 1933. A week later she woke up with her face and eyelids swollen. From this time it became impossible for her to go out of doors without getting a rash over the whole of her face and hands. The skin was red and thickened and covered with a flaky desquamation. The sensitisation to light gradually became so severe that she had to keep the curtains constantly drawn. The only time the rash disappeared completely was in July, 1933, after being in the dark for a whole week. She then had to go to her daughter's wedding, and although she wore a veil a severe relapse followed. She was treated in many ways without the slightest improvement, except that a subcutaneous injection of 3 minims of 1 in 1,000 adrenaline relieved the swelling and irritation of the skin to a slight extent. Her cutaneous reactions to a large number of allergens were completely negative, and the reaction to histamine was no greater than the average normal.

It was clear that the basis of her condition was an acquired hypersensitiveness of the skin to the chemical substances produced locally by the action of sunlight. It occurred to me that it might be possible to desensitise her. Her back was exposed every day to increasing doses of ultraviolet rays, the surrounding skin being protected by black paper and her head and face by covering them with a black cloth. The dose was gradually increased from one square inch for one minute to four square inches for sixty minutes. The treatment proved most satisfactory; the increasing doses of light produced no reaction, and the

patient found that she was gradually able to expose herself to light of increasing intensity and for increasing periods without ill-effect. By the end of the year she regarded herself as cured, and from the beginning of 1934 until May, 1937, when I last heard from her, there was no recurrence.

CARDIOLOGY

Auricular flutter.—Those of you who have been my ward-clerks know that I am inclined to fight shy of heart cases and to leave them to Dr. Conybeare on account of my deafness. Before the war, when my hearing was quite good, I was not specially interested in cardiology, but by chance I became associated with a classical case of heart disease.

One afternoon in 1908 I noticed that a young woman with mitral stenosis and a radial pulse of normal rate had jugular pulsation of extraordinary rapidity. That was in the days of Mackenzie's polygraph and long before the invention of the electrocardiograph. I remarked to Gordon Goodhart, my house physician, now a distinguished pathologist, that we ought to get a simultaneous record of the jugular and radial pulses. There was no polygraph at Guy's, but Goodhart was very keen and managed to buy one for himself the same evening. He took numerous records, and the great Mackenzie himself, who had recently migrated from Burnley to London, came to see the patient and discussed the curves (one of which is reproduced in Fig. 1). We found that the jugular pulse was constantly 234, and that its rate was unaffected by exercise and atropine, both of which accelerated the radial pulse. It was clear that the auricle was contracting quite independently of the ventricle, and we assumed that 234 was the maximum rate at which human heart muscle could contract.

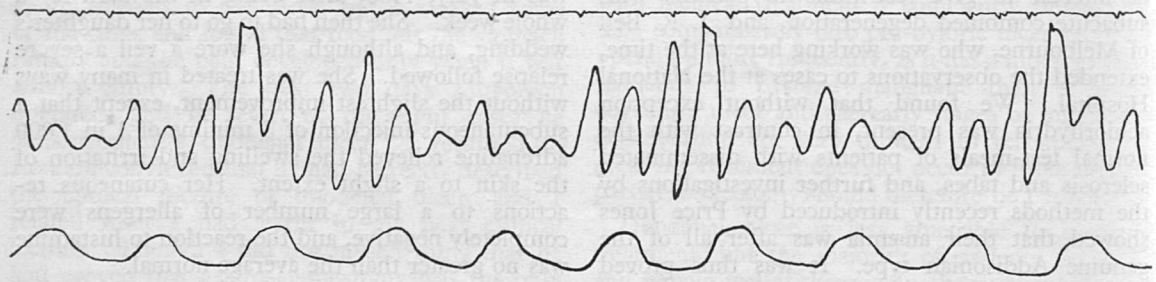


Fig. 1
Jugular and apical tracings in auricular flutter.

Goodhart and I described the case in a paper in the *Quarterly Journal of Medicine* after Mackenzie had approved the manuscript. I sent him a reprint, which he acknowledged by saying how foolish it was of us not to mention that this was a typical case of "nodal rhythm," a condition which he had, in fact, described for the first time only after our paper was in print. A few years later I happened to meet him, and he began the conversation by saying, "You remember that case of auricular fibrillation you had at Guy's; well . . ." Auricular fibrillation had just been discovered by means of electrocardiography, and Mackenzie by that time no longer believed in nodal rhythm. Finally, just after the war, Professor Ritchie of Edinburgh sent me a reprint of a paper, the first to be published in Great Britain, on auricular flutter, and there I found our case, which had masqueraded as nodal rhythm and auricular fibrillation, had at last come home to rest as the first recorded example of auricular flutter!

OPHTHALMOLOGY

Retracted and spiral fields of vision in hysteria.—I am unwilling to diagnose hysteria in the absence of gross hysterical symptoms. Some people, however, believe that the appearance of symptoms is only an incident and that there is a permanent psychological state which can be regarded as hysteria. In this belief Charcot seventy years ago looked for "stigmata," which might indicate that an individual was hysterical though no obvious hysterical symptoms were present. He regarded certain forms of cutaneous anæsthesia and a contracted field of vision as the most constant of these stigmata. Later observers noticed that if perimeter observations were continued after the field of vision had been mapped out in an hysterical patient it became progressively more contracted, and a spiral was produced which was thought to be pathognomonic of hysteria. In 1907 I saw Babinski, Charcot's most distinguished pupil, demonstrate that the so-called stigmata never

appeared spontaneously, but were always produced by suggestion on the part of the observers.

J. L. M. Symns and I thought it would be of interest to investigate further the spiral fields of vision (1918). We found that the spiral depended upon the method of examination; if instead of moving the white disc of the perimeter from without inwards it was moved in the reverse direction an outward spiral was obtained. In one patient we produced an inward spiral which finished with an extremely narrow field; we then "unwound" the spiral till the field returned to the normal size. The pictures (Figs. 2 (*a*) and (*b*)) show an inward spiral in the left eye and an outward spiral in the right of the same patient. I had hoped that this *reductio ad absurdum* would be the death-blow of the retracted and spiral fields of vision as hysterical stigmata, but I find them still described in the latest (1937) edition of Purves Stewart's "Diagnosis of Nervous Diseases."

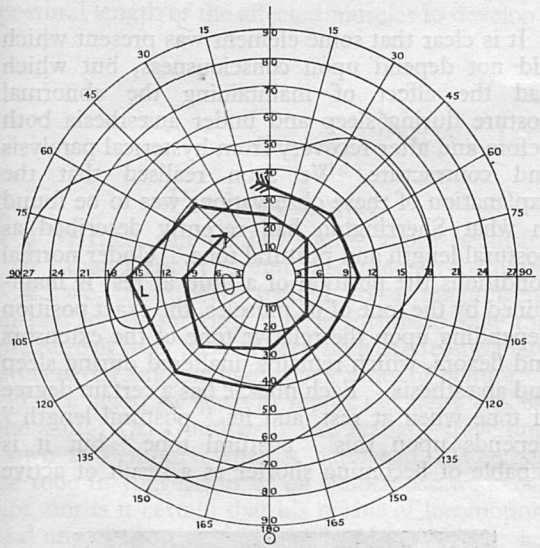


Fig. 2*a*.
Inward spiral field of vision in left eye.

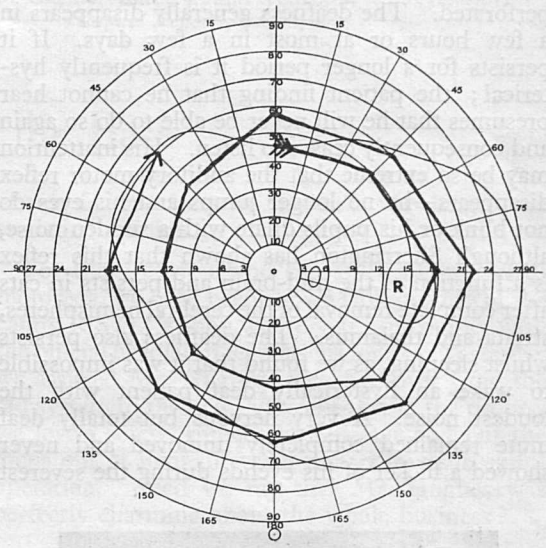


Fig. 2*b*.
Outward spiral field of vision in right eye.

Hysterical blindness.—Seeing is an active process and depends upon looking. If one's mind is deeply engaged in thought it is possible to pass a friend not only without recognising him but also without seeing him, because one is not looking. If as a result of suggestion an individual is convinced that he cannot see he ceases to look, and his inattention may be so extreme that he becomes genuinely blind. Attention involves some active process by which the resistance at the synapses in the nerve tract involved is diminished, possibly by projection of dendrites. Inattention would involve retraction of the dendrites, which in an extreme case might be so great that the stimulus not only fails to reach the cerebral cortex but might fail to produce a reflex at a lower level. I have seen two cases of hysterical blindness in which the light reflex of the pupil disappeared, to return instantaneously when vision was restored by teaching the patient to look and to see. The first was a soldier, whose blindness developed after being stunned by a shell explosion in September, 1914, and was cured by simple psychotherapy in the form of explanation and re-education at a single sitting four years later. The second was a man of 35, who had been temporarily blinded after being torpedoed during the war, but had recovered completely until ten years later, when he suddenly collapsed in the street and found on regaining consciousness that he was blind. The blindness remained complete till he was admitted to hospital eighteen months later. He was cured at a single sitting by my house physician, David Ellis, who had read my account of the first case in my Croonian Lectures.

I still find it difficult to convince neurologists that the pupil reflex can be abolished in profound hysterical blindness, but there could be no doubt about the accuracy of the observation in these two cases. The second was shown at a combined round on two consecutive Tuesdays, and several of those present confirmed the observation that the pupils, which had failed to contract with light

on the first occasion, contracted normally on the second.

OTOLOGY

Hysterical deafness.—One must listen in order to hear just as one must look in order to see. Most of you must have attended lectures so dull that you ceased to listen and then became so absorbed in your day-dreams that you no longer heard the lecturer's voice. An explosion in the near neighbourhood frequently gives rise to deafness, probably as a result of concussion of the internal ear, as it may be associated with vertigo and nystagmus, and one or both drums may be perforated. The deafness generally disappears in a few hours or at most in a few days. If it persists for a longer period it is frequently hysterical; the patient finding that he cannot hear presumes that he will never be able to do so again and consequently ceases to listen. His inattention may be so extreme that the auditory-motor reflex disappears—he no longer jumps and his eyes do not blink or his pupils dilate with a sudden noise, although Sherrington has shown that this reflex is a function of the mid-brain and persists in cats after complete removal of the cerebral hemispheres, striata and thalamus. The deafness also persists whilst sleeping, as we found that it was impossible to wake an hysterically deaf patient with the loudest noise. A very nervous but totally deaf mute remained completely unmoved and never showed a flicker of his eyelids during the severest thunderstorm I have known, though next day he was completely cured when it was explained to him that in order to hear again he must listen, a form of simple psychotherapy which is always successful in hysterical deafness. It is worth remembering that many people who are partially deaf as a result of organic disease could hear much more than they do if they took the trouble to listen and make the best use of their residual hearing.

ORTHOPÆDICS

Postural length and postural tone.—During the war hysterical paralysis, with or without contracture, was a very common sequel of wounds. We found that the resultant abnormal postures were still present during sleep and under deep anæsthesia, although the affected muscles relaxed. Moreover, after the paralysis or contracture had been cured by psychotherapy, so that the patient was able to perform every movement in a perfectly normal manner, the abnormal posture often persisted, unless the patient kept his limb for a time in a normal position by a voluntary effort. (Fig. 3 (*a*) and (*b*).)

It is clear that some element was present which did not depend upon consciousness, but which had the effect of maintaining the abnormal posture during sleep and under anæsthesia both before and after recovery from hysterical paralysis and contracture. We soon realised that the explanation of these observations was to be found in what Sherrington had recently described as postural length and postural tone. Under normal conditions the position of a limb at rest is maintained by the tone of its muscles, the exact position depending upon the relative tone of the extensors and flexors, which remains unaltered during sleep and anæsthesia. Each muscle has a certain degree of tone when at rest, and its "postural length" depends upon this "postural tone," but it is capable of becoming shorter as a result of active contraction and longer as a result of active relaxation.

Painful disorders and injuries of muscles, joints and peripheral nerves frequently result in the production of abnormal postures, which may be adopted voluntarily in order to relieve pain, or may be caused by reflex action, the too-prolonged use of a splint, or the activity of a normal muscle the opponent of which has become paralysed. When complete recovery from the primary disease

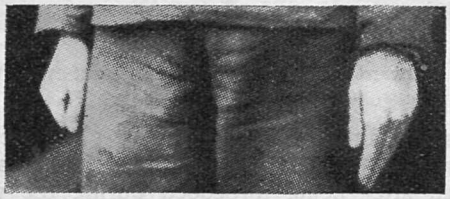


Fig. 3*a*.

Abnormal posture of left hand persisting after complete recovery at a single sitting from hysterical contraction and paralysis of sixteen months' duration, due to wound of left hand.

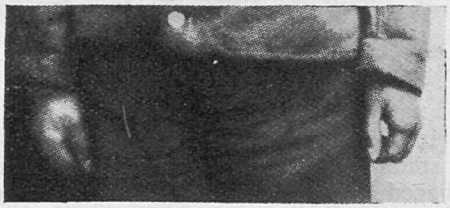


Fig. 3*b*.

Same as 3*a* after treatment by re-education.

or injury has occurred, the patient is able by voluntary action to correct the abnormal posture. But the abnormal posture has led to the development of a new postural length of the muscles concerned so that the abnormal posture remains just as it was when the primary disease was still active. Many abnormal postures of the spine and of the limbs following disease or injury are of this nature. The condition is not hysterical, but the result of the normal physiological process concerned in postural tone. The abnormal posture can be rapidly cured by teaching the patient to maintain by an effort of will the natural position for a sufficient length of time to enable a new postural length of the affected muscles to develop; this is best done by exercises in front of a looking-glass.

It is only recently that the importance of Sherrington's work on the postural tone and postural length of muscles has become recognised by orthopædic surgeons. Mr. Lambrinudi and Mr. Stamm have written an illuminating note on the subject in the last number of *Guy's Hospital Reports*.

REFERENCES

1. *Guy's Hospital Gazette*, 1930, xliv, 382.
2. *Guy's Hospital Gazette*, 1930, xliv, 454.
3. Gaymer Jones, J., and Venables, J. F. (1939), *Guy's Hospital Reports*, lxxxix, 47.

News from the Base

Pembury Letter

THERE can be few sights more beautiful than Kent in autumn, and the past fortnight we have been treated to a magnificent display of russet tints. It is fortunate that the pressure of work has not been such as to completely prevent our enjoyment of the beauties of Nature.

Once again we have to report sad news among the staff. Dr. Douthwaite was actually travelling down to Pembury when it happened. Whether he rode in Juggernaut or on Velocipede we know not, nor is it certain that his means of locomotion had any connection with the incident; but as he was passing Horsham Cottage Hospital an intestinal catastrophe overtook him, and he was sorely struck. Wracked with pain, but keeping a bold exterior, he presented himself at the aforementioned hospital with diagnosis ready made. Therapeusis was at once embarked upon, and we are glad to know that he is getting on well. He has our sympathy and our wishes for a speedy recovery.

(*Note.*—We believe this story to be substantially correct, but you know how country folk do talk.)

We are glad to announce that our European traveller has returned from his expedition to Rumania and Hungary. We understand that on his return, " Cook's " asked whether he wished to travel home via Paris or Vienna ! !

Achtung ! *Achtung* ! The Gestapo consider this to be conclusive evidence that he staged the Munich bomb explosion.

In war-time one must undertake unusual duties, and two members of our staff are conducting a " Fever Course " at the local isolation hospital. We understand that they are learning quite a lot about fevers, but we haven't yet heard the students' opinion.

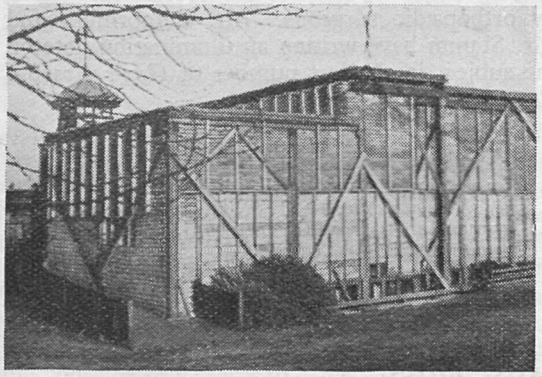
For those of you who can still call yourselves motorists, we have been shown (by courtesy of the canny R.S.O.) a shop where you can comply with the official headlamp regulations for 3*s*. Yesterday we assisted Mr. Hughes to change over from the old system to the new. Except that in the process we lost a screw, ruined the reflector and put the focus out of joint, it was a remarkably successful operation. Need we say that Mr. Hughes was perfectly charming about the whole business ?

N. M. J.

Orpington Letter

IN the theatre (dramatic) of Renaissance Italy, there was a genus of play known as the Commedia del Arte. This consisted of improvisations by the actors in certain stock parts—Harlequin, Columbine, etc. Our theatre (surgical) is just a little like the Commedia del Arte. We have also certain stock parts—instruments, operating tables, anæsthetic machines—and we have also improvisation. Twelve weeks ago the building, which now houses the theatre, housed the baths and shower baths for the washing of the ambulant infirm. With the war came Guy's, and it was decreed that the washhouse should turn theatre. Externally, defence from bombs and shrapnel had to be provided; internally, much reshaping was necessary. Externally, our theatre now resembles a rather beautiful gun emplacement. Internally it is spick and span, ship shape and excellently surgical.

To support the defences, wooden props were pushed through the roof and a wooden framework was built round the walls. Earth bags (i.e., bags of earth) were then piled on and

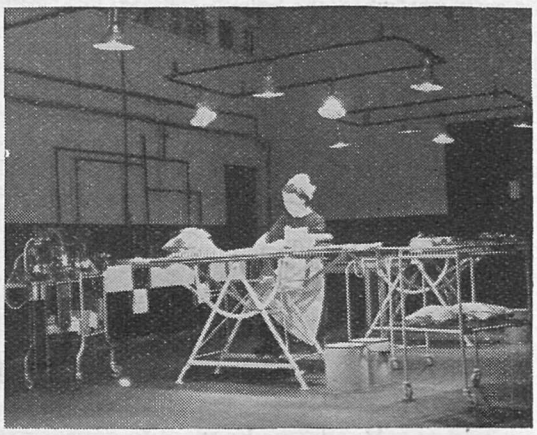


The Outside

around this structure, so that a huge tent of earth bags cover the original hut. At first the supporting props sunk, in places carrying the roof with them, the rain collected in the earth bags and leaked through the injured roof, and many of the sodden earth bags fell to the ground or leant drunkenly in strange directions. But this mischief has been repaired. A better substructure and more earth bags have been added and now the props sink imperceptibly and the roof leaks but very little. A few facts of these defences may be of interest. The cost of these earthworks would pay for the building of an entire new theatre. They have employed eight carpenters and ten labourers for eight weeks. As we operate, over one hundred tons of earth in nearly ten thousand earth bags surrounds us, or like Damocles' Sword, hangs over our head.

The inside is divided into a large theatre, with room for three operating tables, anæsthetic room, sterilizing room and store rooms, surgeon's room and sister's room, X-ray and dark room and our general sitting room. Of all of these we are proud. They are pleasant rooms in which we feel, given the chance, we can do good work. Though our equipment is incomplete, our enthusiasm more than makes up for this lack. Recently, Mr. Doherty (whom we welcome as our new surgical chief) has removed a notable kidney and Mr. McNair has cut away a magnificent leukoplakic vulva, thus giving birth respectively to genito-urinary and gynæcological surgery in Orpington.

Our X-ray plant is at present troubling us a little. The Barium Sulphate with which we have threatened our patients has not yet materialized. There are also difficulties about transformers and fuses. Our large transformer electrifies the radiographer rather than the



The Inside

Roentgen tube. Our small transformer behaves well, but will not penetrate the obese. If we step up a high voltage, we blow our own fuses. If we put in stronger fuses, we are fearful of blowing the Electric Light Co.'s fuses. Unperturbed by such physics, the radiological department carries on with no small success.

Local news is held over till next letter.

E. B. R.

Farnborough Letter

ANOTHER Show, further convoys of medical and surgical problems from hospitals geographically more, but technically rather less advanced than we, and for all but the chosen few among the housemen, another pay cheque; constitute our chief news this time.

Our show was again very generously received. Again we drew upon reserves, students and housemen, with occasional spurts of talent from even more exerted spheres. But this time the mixture was more intimate. Nurses and men actually appeared together and simultaneously upon the stage, which so far seems to have produced no evil effects. Mr. Knight, our neuro-surgeon, sang and cross-talked with Mr. MacLean with hit and spirit: MacLean and Stafford-Clark produced a burlesque of the porters and the system of calling house-officers by cascades of coloured lights. Madam Philipski again sang beautifully, while the finale was a most excellent ballet executed by the nurses. Everybody worked very hard to ensure success to the show,

fortified by the goodwill of their audience and whatever could be obtained in the green room. On the next day we were all very tired, and some of the housemen seemed to have headaches or something: but we hope to produce a third show soon.

Convoys of other people's patients continue to be sent to try us. Not that we object to taking over cases which were clearly very baffling to some of their future mentors; but we do wish that we might be vouchsafed just one peep—just one—at the X-rays which have very properly been taken at the evacuating hospital, and perhaps a more revealing history than "prog: satis." about patients who still have quite a lot of pus to be rid off when they arrive.

The arrival of a number of cheques last week resulted in many winning smiles and happy faces on the morning round. Of course, Mr. Stafford-Clark was unlucky again: perhaps some rotten sneak has been telling the Ministry that he is sometimes a trifle late for breakfast. Messrs. Rowlandson and A. H. Knight were similarly neglected, but they, it appears, are subject to the new rate of pay which has not yet been promulgated (luscious word) and so is not available.

We mentioned last time the project to start a Fracture Clinic here. Vague rumours hint that this may soon be established. But of our other plea for improvement we have heard nothing. The evil of a compromise that strikes at the very roots of the Guy's training for nurses is one which clearly cries out for remedy.

We have one more suggestion to submit with due humility, for although it is a purely local matter, it is important to all Guy's students. Might it not be possible to institute a take-in week for dressers here? This is already provided for the Gynæcological firm. On the general surgical side, the interest and variety of admissions, so often after dark, is a valuable feature of the work here.

D. S. C.

Dartford Letter

FOR many weeks now the studious members of the mess down at Joyce Green have been engaged in their work of national importance. Neither gibes nor sneers nor shameless perfidy by those set in authority has served to deflect a man of them from his sober path of duty.

Almost there came one lapse. For a brief space, it must be confessed, a tiny cancer of commercialism crept unbidden into the thoughts of many, spreading its evil roots far and wide and violating the serene calm of this communal devotion. Though troubled by the consciousness that in their great profession virtue is its own reward, many began to feel in secret that some small monetary recognition of their services, though worthless to themselves, might serve perchance to provide their wives with changes of flannel or their children with pennies for the bus to their council schools.

These cares have been allayed. The matchless motive of self-preservation, where every other sense was dead, has forced a Ministry tardily to fulfil the least of its obligations to all but a hapless few who rashly left in their agreements some loophole, now greedily seized upon as a pretext for further specious evasion.

And so to relaxation. All were grown weary in the service of the State, and what better outlet than a dance? A dance was held. It went well. The essence of this dance was that it was held in fancy dress.

Now there are some men who can array themselves as Peter Pan or the Duke of Burgundy and feel no twitter of misgiving, no sudden consciousness of incongruity. Such men are few. At Joyce Green there are none.

But what is the remedy? There is but one. Upon these falls the privilege to add with dignity to the presence of lovely women and exhilarating song, some call it crooning, all that is required for the completion of an immortal triad. And so it came about that the dance went well, for none was found to shirk. One sees it still. A tangled pattern of brilliant colours. All here is gaiety and the defeat of care. Sister and Staff Nurse reunited, physician and surgeon in agreement at last. For how can they differ when each has thought privately from the very moment of his arrival that he had no idea that the blonde probationer really looked like that.

But what is this? Two nurses dance together. And here surely is no ordinary nurse. A giantess she seems. A veritable Amazon of a nurse. Six feet tall at least, with girth to match, her rouged face showing through its powder patches, and atop it all her nurse's cap perched jauntily athwart her flying flaxen curls. How well she dances, too. What vigour! What zest! But wait. Look out! By God, she's down! The xylophone leaps on the dance-band's platform and the floor shudders beneath that mighty crash.

She is quite undaunted. In a moment she is up again, with a stentorian shout of laughter, dragging her fainting partner with her. What a nurse! What a woman! How like an angel!

How like a fairy ! And, in particular, what fairy ? The comparison is on everyone's lips. Why, of course, that winged fairy that once danced her way so enchantingly into the hearts of the audience at a recent Residents' Play.

Oh, yes, not a doubt of it, the dance went well.

The *tempo* slackens. Events move slower now again. And on the whole less cheerfully. For two of the senior consultants have left Dartford and everyone is the poorer for their loss.

I. S.

The Medical School

THE Medical School moved into Tunbrudge Wells on October 28th and is now divided among four houses. Hurstmead, the largest of them, has 17 bedrooms and is under the care of Mr. and Mrs. Whillis; 6, Sandrock Road, the next in size, is looked after by Mr. and Mrs. Spurrell; 5, Sandrock Road, by Dr. Haslewood and Rookley, the smallest, with only eight bedrooms, is presided over by the Dean.

The ground floors of these houses have been converted into laboratories for physics, histology and physiology and lecture theatres; and the upper floors into dormitories containing three to eight beds. Rookley is entirely residential. The chemical laboratories and dissecting-room are at Sherwood Park, about half a mile away, which was at one time a clinic and has now been taken over by the Dental School. The Medical School Office is here, too.

Meals are eaten in Hurstmead and, because of the number of students—there are over 130 living in—they have to be held in two shifts. It was found after a few days that even this division failed to relieve the congestion at meal times, and a number of students now take all their meals at a cafe in the town.

Hurstmead possesses a grand piano and several of the Residents have turned out to be quite accomplished pianists. All tastes are satisfied, as they include exponents of classical music and jazz. In the Dean's house, of course, there is a gramophone. Other forms of recreation exist. There are several cinemas in Tunbridge Wells, about a mile away, and a pub every few hundred yards. Teams have been formed for rugger, soccer and hockey, and these will be played enthusiastically when grounds are available. Some rugger has already been played at Tonbridge School, about five miles away.

Moving in of the students was accomplished without any major troubles. They arrived by a special train from London Bridge, their luggage following by lorry. Owing to the hard work put in by the advance party during the preceding few weeks, everything was in order for immediate habitation. There were the usual complaints about not having anywhere to put one's luggage, but they were soon dealt with. One or two parents arrived to see that their sons were being treated properly, and one loving mother insisted on making her son's bed with her own hands.

We have only been down here ten days, at the time of writing, but we are fast becoming acclimatised. We expect, in another few weeks, to become almost reconciled to our fate of living out of London.

M. L.

The Starlings' Revue

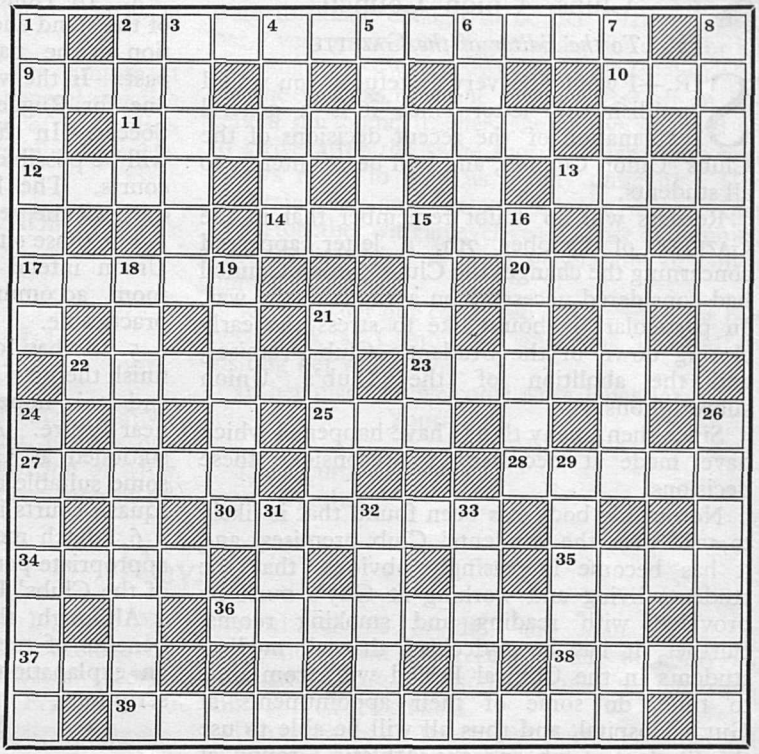
THE eighth Revue was presented on Saturday, 4th November. The technical arrangements were not as good as usual. The chorus, gorgeous in dresses from the Palladium and effectively lighted, rose to heights unachieved before. They have improved greatly and deserved the applause they received. Each of the Southern Sisters sang a part suited to her personality. The barmaid's song and the imitation of the American operatic star, were executed with a humour and neatness that were most effective. " Souperstition," by John Gordon, was a light sketch which showed Jerry O'Gorman and Eric Budd to advantage, the first as a frustrated diner who cannot eat his soup because he has no spoon, the second as one who audibly relishes his victuals. Mr. Harold Hamilton and the Rev. Dudley Hodges broke gramophone records and custard pies over each other's head with great gusto. The Works Department showed us the " Fourth Form at St. Guy's," under a schoolmaster who must have studied under Will Hay. " Horsetuschlor " introduced Budd as a showman, leading a composite horse, consisting of West anteriorly and Coffey posteriorly. Finally, Mr. Edward Cooper sang us songs of doubtful morality, but certain wit with a finished ease and grace. He is an old friend and always most welcome.

We have to thank Tom Ronald for lending his bustling presence to two of the sketches and Jack Phillips, who played the piano.

A. G. C. C.

Crossword No. 8

By "Pepsin"



ACROSS

2. Jinto.
9. I'm in the cadets.
10. How the solver should address the compiler.
11. Would this describe a flighty person?
12. Powder made by pounding the backward animal.
13. It is the end of an inflammatory disease.
14. Saint in need made what the birds did.
17. Would this make your blood boil?
20. Entrance.
21. Common to Adam and Eve.
22. Hardly a gluttons complaint.
23. Taken out.
25. A laughing matter, this.
27. Disrepectful bird?
28. Remove incrustations.
30. Agree it sounds like going up.
34. This hospital treats venereal disease.
35. Source of pidgeon's milk.
36. Our cachet makes a sort of case.
37. Organ of retaliation.
38. Food of experience?
39. The second part is usually the first to the mother. (2 words, 5 and 6).

DOWN

1. Destroy the vital functions.
2. Hypnotic countenance.
3. 198 precede the French. How cold!
4. Undoubtedly the answer.
5. Found in 19 dn.
6. Objective after the subject.
7. Awkward disease to have in the blackout.
8. False teeth in the glass?
15. When the beast is disturbed this results.
16. Several people go down.
18. Kind of valve.
19. Reactive to light.
21. Result of losing the beginning.
24. Most incisive this.
26. Describes the night mail?
29. Sweetens the breath.
31. There are three in the ear.
32. Late in starting praise.
33. It's rule is rough and ready.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 28th November.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 7: A. Gordon-Taylor,
28 Battlefield Road,
St. Albans, Herts.

SOLUTION No. 7

P	R	O	N	T	O	S	I	L	■	A	S	S	A	Y
A	■	R	■	A	■	O	■	I	■	C	■	H	■	■
N	E	O	P	L	A	S	M	S	■	U	N	A	R	M
D	■	T	■	E	■	O	■	T	■	M	■	M	■	A
I	G	U	A	N	A	■	R	E	M	E	M	B	E	R
G	■	N	■	T	O	P	E	R	■	N	■	L	■	C
U	N	D	O	■	R	■	S	■	D	■	M	E	S	H
L	■	■	■	S	T	O	P	G	A	P	■	■	■	F
A	R	C	H	■	A	■	E	■	T	■	S	C	A	R
T	■	A	■	O	■	S	C	O	U	T	■	Y	■	A
I	N	D	I	R	E	C	T	■	M	O	T	S	U	C
O	■	A	■	A	■	O	■	C	■	P	■	T	■	T
N	A	V	E	L	■	T	R	O	U	S	S	E	A	U
■	■	E	■	L	■	C	■	X	■	E	■	I	■	R
C	A	R	R	Y	■	H	E	A	R	T	A	C	H	E

Correspondence

Clubs' Union Council

To the Editor of the GAZETTE

SIR,—I would be very grateful if you would publish this letter, since it is a general explanation of the recent decisions of the Clubs' Union Council, and will be of interest to all students.

Readers will no doubt remember that in the GAZETTE of October 7th, a letter appeared concerning the changes the Clubs' Union Council had considered necessary on account of the war. In particular, I should like to stress the early closing down of the Student's Club premises, and the abolition of the Club's Union subscriptions.

Since then, many things have happened which have made it necessary to reconsider these decisions.

No outside body has been found that is likely to take over the Students' Club premises, and it has become increasingly obvious that the students living and working at Guy's must be provided with reading and smoking rooms. Further, it has been decided that all medical students in the Clinical Period will, from time to time, do some of their appointments at Guy's Hospital, and thus all will be able to use the Students Club and the Athletic Ground at Honor Oak Park, should they be continued. On the other hand, all students in the Medical School and most of those in the Dental School will remain at Tunbridge Wells, and either they themselves or some other body will have to provide accommodation similar to that available at Guy's.

Although it is of advantage that each group of students should look after its own activities in its own particular neighbourhood, it is essential that they should be financed by one central body. The Clubs' Union has decided to make itself responsible for the financial support, as has been the custom in the past. The subscription to the Clubs' Union will therefore be reinstituted at the new rate of four guineas per annum.

For this, members will receive the following benefits :—

1. They will receive a copy of the GAZETTE free.

2. Admission to the ground at Honor Oak Park will be free.

3. The Students' Club will be continued as in the past. Similar facilities will be provided at each of the other centres where the number of students makes this necessary.

4. At Honor Oak Park the ground in front of the stand and the changing-room accommodation in the pavilion will be available as in the past. In the winter this will provide two pitches, one for Rugger, and the other for Rugger or Soccer. In the summer, Cricket and Athletics will be possible, with the usual number of grass-courts. The hard tennis courts will be kept open all the year round.

For those situated at other centres, the Clubs' Union intend to rent grounds and changing-room accommodation, in so far as this is practicable.

5. It has fortunately been found possible to finish the new Squash Courts and Gymnasium, and it is hoped that this will be ready in the near future. As this will favour those students stationed at Guy's, it is intended to come to some suitable agreement with those in charge of squash courts in the various other centres.

6. Each member will become eligible at the appropriate period for election as a Life Member of the Clubs' Union.

Although this by no means exhausts the benefits of membership, it will, I hope, afford an explanation of the decision to restart subscriptions.

Yours, etc.,

C. S. DARKE,

Hon. Sec. of the Clubs' Union Council.

The Late Drs. Poulton and Reynolds

To the Editor of the GAZETTE

SIR,—May I add a word or two to your appreciation of Poulton and Reynolds ?

I have always heard that Poulton, if he had not had some trouble with his heart, would have been as good a hockey player as his brother was a rugby football player. But the thing that struck me about Poulton was his extraordinary courage and conquest over himself. After he had had some thyroid trouble, he used to attend committee meetings regularly. These meetings were of all kinds, and he frequently spoke at them expressing his opinions freely, but never with any loss of self-control. I think that this depended largely on his religious opinions.

Reynolds did a great work for Guy's which needs to be known. The last war bred the very worst type of house officer—conceited, idle and incompetent. It was left to Reynolds, who came back to Guy's after the war to do a second term

as a house-officer, to recall the traditions of this post, and work them properly. If it had not been for Reynolds the house-posts and the care of the patients would have sadly degenerated, it may be permanently.

I write from the outskirts of the Empire at Dagenham Dock, where to do a general practice properly requires the earnestness of a Poulton and the cheeriness and competency of a Reynolds.

Yours, etc.,

A. RALPH THOMPSON.

Dagenham,
Essex.

Resignation of Miss D. Holland

To the Editor of the GAZETTE

SIR,—May I, on behalf of many Guy's nurses, both past and present, express our very deep regret at the resignation of Miss Dorothy Holland, and also our appreciation of all that she has done for us? Sister Dorothy has for many years been the Senior Sister in the Preliminary Training School, and those of us who were fortunate enough to be her "lambs" owe her a very great debt of gratitude, not only for all she taught us—which was considerable—but also for the fine example she set us. Herself an excellent nurse and teacher, she always inspired us to strive after the same high standard, and was always ready to help us in any difficulty. Her understanding and personal interest in each one of us, together with an ever-ready sense of humour, have endeared her to many generations of Guy's nurses.

We send her our combined good wishes for her new work at Cambridge, and look forward to visiting her there soon.

In her place we welcome Miss Janet James.

Yours, etc.,

EVELYN A. OPIE.

The County Hospital,
Pembury.

Review

The Single-Handed Mother. By LINDSEY W. BATTEN, M.B., M.R.C.P., with a Preface by H. G. WELLS. Published by Messes. George Allen & Unwin, Ltd. Pp. 185. *Price* 5*s*.

THIS is a book which aims at giving a complete survey of the life and management of a child from birth to about two to three years. There is a chapter on the Baby in Prospect as an introduction to the main part of the book, and some good common-sense writing under the headings of "Management" and "Bad Habits" relating to the child who is a year or more old.

The chief virtue of the book is that it does not propound any hard-and-fast system which has to be followed down to the last vitamin. A straightforward scheme of diet and management is propounded and the reader is left to apply it, with any necessary modifications, to her own child and circumstances.

The chapters on Breast and Bottle Feeding and Milk to Full Diet should form an adequate guide to any mother during the stages of her child's first year. There are many single-handed mothers and others who, whatever their circumstances, have or like to have the supervision of the details of their children's upbringing. A book such as this, which is not intended to be a textbook, but to be perused in order to gain a general impression of infant management, should find a place in the home of many mothers.

W. P. B.

Sport and Hospital Information, etc.

Rugby

Guy's v. Harlequins

HARLEQUINS were the visitors to Honor Oak Park on Saturday, October 28th, when they inflicted on Guy's their first defeat of the season by 2 goals and a try (13 points) to nil.

It was a cheerless afternoon, but this did not keep the crowd away, and they were rewarded with an exceedingly good game with forward play predominating. Guy's pack were up against something far more formidable than previous games, as can be imagined with such players as Prescott, Huskisson, Chapman, Tippett (hooker) and Crickmay opposed to them. Nevertheless, Guy's forwards acquitted themselves well, and indeed stopped many dangerous rushes, in addition to taking the initiative on occasions with sharp bursts against heavier opponents.

Guy's outsides had few chances to attack, but they excelled with some good hard tackling, while Halamandres and Van Steytler were up against a lively combination in Steele and Evans.

FARNBOROUGH PATHOLOGIST

From the kick-off the Quins were soon attacking in the Guy's half, where Chapman kicked to touch. From the line-out the ball went to Charlton, who also found touch. Van Steytler was well tackled when placed in possession from a line-out, which took the Quins well towards our 25, and Goodall made an unsuccessful attempt at a drop goal. Skea was hard pressed when he went down to a Quins' forward rush, but Guy's forwards relieved by a good dribble. Crawford had a cross-kick charged down by Goodall, and the Quins' forwards in a typical rush carried the ball to Guy's line, where Huskisson went over for an unconverted try.

Following a bout of touch-kicking, Guy's forwards were going strong, with Mullins prominent, but the Quins checked them, and took the ball to the Guy's line for a drop-out. A score looked possible when Crawford broke away and, handing off well, made a good pass to Van Steytler, who was, however, pushed into touch. Steele tried to break away on his own, but Mullins had him down with a fine tackle. Quins continued to press, and Skea, although hampered by oncoming forwards, got the ball into touch, which was followed by a kick to touch by Charlton to take Guy's into their opponents' half. A forward pass spoilt a promising Quins' movement, and from the resulting scrum Babrow got possession, but was tackled immediately. A line-out near Guy's line led to a three-quarter movement by Quins, but the pressure was relieved when Mullins scrambled the ball into touch. Guy's had the ball out quickly from a scrum, but Babrow's pass to Kynaston was dropped. Halamandres was crocked in following up, but soon recovered, and a forward pass again held up the Quins when they looked likely to score. Half-time: Guy's, nil; Harlequins, 3.

On the resumption it was refreshing to see the Guy's three-quarters moving well to enable Charlton to find touch, which was followed by a mark by Kynaston. A Guy's forward rush took them into the Quins' half, which was followed by a scrum, from which the Quins' outsides put in some fine passing, but Van Steytler sent them back with a good touch-kick, and Mullins followed by intercepting a pass.

Quins were soon back in Guy's 25, where Coffey and Lane-Roberts dribbled some distance to relieve the danger. Skea had another anxious moment when going for an awkward bouncing ball and did well to find touch. From a loose scrum Steele got the ball nicely out to Evans, who made a fine zig-zag run to send Keay flying in for a good try, which Chapman converted.

Guy's were hard pressed to hold the Quins; first the forwards made a rush, using their feet well, and then off-side came to their rescue. Skea again just got his kick into touch, although hampered, which was followed by the Quins taking the ball over the Guy's line, but just failed to get the touch-down. From the drop-out the Quins three-quarters indulged in some good passing, handling the ball well, until Steele was brought down, and Van Steytler made one of his best touch-kicks.

Darke was prominent in a Guy's forward rush, but the Quins were soon back. Babrow made an effort to break through, but was well tackled. Some scrummaging on the Guy's line enabled the Quins' forwards to wheel, from which the ball was passed out to Keay, who eluded a tackle and touched down under the posts for Chapman to convert.

All seemed clear for a try for Guy's when Babrow, brushing past two opponents, made a fine run, with Charlton alongside, who took the pass well but was pulled up owing to just putting a foot into touch when he appeared to be through. Guy's were now having more of the play, but Mullins missed with a penalty kick from near the touch-line. Guy's then got the ball over the Quins' line, but were beaten for the touch-down. Chapman charged down a pass out from Halamandres, and, following a scrum, Steele went off with a leg injury. Chapman went to scrum-half for the Quins and sent out a pass to Evans, who failed with a drop-kick.

First Guy's, then Quins tried forward rushes, and Babrow was tackled when the final whistle went, leaving Harlequins well-deserved winners of a hard and enjoyable game.

Team.—R. L. Skea; D. W. F. Charlton, L. Babrow (captain), R. U. F. Kynaston, J. P. Crawford; J. van A. Steytler, C. Halamandres M. R. Mullins, H. F. Osmond, P. A. Lane-Roberts, J. R. D. Williams, J. C. Bulstrode, C. S. Darke, A. G. Albers, B. U. Coffey.

Guy's v. Cambridge University

CAMBRIDGE University fielded a strong side against the Hospital on Wednesday, November 1st, at Grange Road and ran out winners by 4 tries, a placed goal, and 2 dropped goals (25 points) to nil, which at first glance looks as if the game was very one-sided, but, quoting the remarks of an impartial observer, " all things considered is not a fair reflection on the match." It is true Guy's were much below their recent form and gone were those brilliant movements of forwards and three-quarters which we had become so accustomed to, but they continually kept the Cantabs. on their toes.

Guy's flattered themselves by forcing the pace, and in the opening minutes were always dangerous,

but once the Cantabs. warmed up they were the masters. Steeds, in the Cambridge front row, gave a brilliant performance, but he was overshadowed by Newton-Thompson, who was always to the fore, his dropped goal in the second half was positively brilliant. Swerving and eluding a Guy's forward, he took a chance and, although to the right of the goal posts, he pivoted on his left foot and sent the ball soaring between the posts. Grose, in his Richmond stockings, was fast and always in the thick of things.

Cambridge had more of the ball from the set scrums, but it was refreshing to see Guy's getting the better of their opponents in the line-outs. Vann, deputising for Halamandres at the base of the scrum, performed creditably, but he was collared on several occasions by his opposite number who watched the ball carefully in the scrum.

A word of praise to Lewis, the Guy's full-back, who compared favourably with Gibson in the same position for Cambridge, and he kicked well. Guy's forwards saw quite a lot of the ball, but were well marked by the University forwards, who never allowed the Guy's pack to become dangerous.

Babrow was often in the picture and the three-quarters tried hard to penetrate the Cambridge defence, but were held up twice when they were almost on the point of scoring, and at least they did set an object lesson in the art of drawing the defence before passing the ball, although had hey not bunched so close they would most certainly have had something to show on the score-board.

After thirteen minutes Cambridge started the scoring when Henwood dribbled over for a try following a short punt by Knapp.

Cullingworth, the Cambridge scrum half, took the ball from Guy's back row and, dodging round the blind side, ran some distance to the touch-line before being brought down just short of the line, but not before he had passed to Grose to cross near the flag. Williams's kick was magnificent, but he had the mortification of seeing the ball bounce from a post.

Just before half-time White sent a dropped kick at goal on to a post, but two minutes later he was successful. Incidentally, White was in great form, showing a fine turn of speed when cutting through and occasionally selling a dummy. Half-time arrived with the score: Cambridge, 10 points; Guy's, nil.

After the interval Guy's made several dangerous attacks, but the Cambridge marking and tackling soon held them up, for the University to take the initiative, and Guy's were hard pressed. White was again in action by some clever dodging which enabled Knapp, a fast winger, to leave the opposition standing by racing over for a try.

Cambridge continued to press, and good work by White and Newton-Thompson led to Grose again crossing the Guy's line, for Williams to add the goal points. Almost immediately afterwards came Newton-Thompson's dropped goal, which has been described above; it was certainly a brilliant goal.

With ten minutes to go Knapp, with a terrific burst of speed, outpaced the Guy's defence for a try near the corner flag, which was not converted.

There was no further scoring, and thus ended a most enjoyable game, always fast and vigorous, with Cambridge University, 25 points; Guy's, nil.

Team.—T. L. T. Lewis; J. P. Crawford, R. U. F. Kynaston, L. Babrow (captain), D. W. F. Charlton; J. van A. Steytler, P. H. N. Vann; M. R. Mullins, H. F. Osmond, P. A. Lane-Roberts, J. R. D. Williams, J. C. Bulstrode T. W. Renton, A. G. Albers, D. N. Fuller.

Hospital Information, etc.

Notice

At the Royal Society of Arts, John Street, Adelphi, W.C.2, on Wednesday, 22nd November, 1939, at 2.30 p.m., a paper on "The Penetration of Rays through the Skin and Radiant Energy for the Treatment of Wounds" will be read by Sir Leonard Hill, LL.D., F.R.S., Director of Research, St. John Clinic and Institute of Physical Medicine. Colonel Sir William Willcox, K.C.I.E., C.B., C.M.G., M.D., F.R.C.P., will preside. The paper will be illustrated by lantern slides and practical demonstrations. Light refreshments will be served in the Library after the meeting.

Papers by Guy's Men

Palmer, G. B. Birth, growth and death of a legend. *Tran. Roy. Soc. New Zealand*, 1939 (June).

Northfield, D. W. C., and Russell, Dorothy S. False diverticulum of a lateral ventricle causing hemiplegia in chronic internal hydrocephalus. *Brain*, 1939, lxii, 311.

Smith, R. E. The spontaneous descent of the testicles at puberty. *Clin. J.*, 1939, lxviii, 446.

Douthwaite, A. H. Gastro-intestinal diseases. *Practitioner*, 1939, cxliii, 461.

Campbell, Maurice. Diseases of the heart and blood vessels. *Ibid.*, 474.

Marshall, Geoffrey. Respiratory diseases. *Ibid.*, 484.

Macintosh, R. R. Anæsthesia. *Ibid.*, 539.

Erskine, David. Sulphonamide intolerance. *Brit. J. Ven. Dis.*, 1939, xv, 260.

Deaths

BUCHANAN.—On November 1st, 1939, at 31 Alexandra Court, Queen's Gate, suddenly, of heart failure, Archibald Graham Buchanan, M.R.C.S., L.R.C.P.

RANSFORD.—On November 6th, 1939, William Reginald Ransford, L.D.S.Eng., of 2 Devonshire Place, W.1.

EDS. { W.D.B. E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

BRITISH Medicine has been taken another step towards normality during the last fortnight by the publication of the recommendations to the Minister of Health of the Advisory Emergency Hospital Medical Service Committee. The ungainly title of this body is an indication of the qualities of the Service which it attempts to reorganise.

The Emergency Medical Service was contrived for one object, and one only : to deal with casualties resulting from the massed bombing of cities. The bombs have not yet come ; are we now to say that the E.M.S. is both wasteful and inefficient ? It is both, but only in an environment the existence of which it could not afford to consider. At its worst it is not as disorganising as the bombs would be ; let us then blame Hitler for its shortcomings, and review the new proposals in a spirit of co-operation.

It may be (though it is a very dangerous assumption) that they are right who say that massed bombings are unlikely to occur now that their value as a tactic of surprise is diminished, but it is certain that no great community can remain prepared to withstand a surprise attack beyond a certain time, for its essential life comes to a standstill. This is as true of London to-day as of a beleaguered mediæval city. We must, to some extent, increase the risk of disorganisation and panic due to bombs in order that the normal life of the community, especially in its economic aspects, should be continued in its task of winning the war.

We shall not here consider the proposals themselves. They are printed in full in both the *Lancet* and *British Medical Journal* of November 25th, with explanatory leaders, and we are all engaged in the contemptible business of mugging them up and trying to see how they apply to ourselves. But we would like to reproduce, without comment, since it concerns the greatest amongst us, the section (6*f*) which seems to strike at the root of the matter :—

The Committee would use its best endeavours to induce those at present enrolled on a whole-time basis at £800 and over to accept the new proposal (i.e., £500, part-time). *If individuals prefer to insist on the terms of their present contract the Ministry would be bound by it, in just the same way as those now serving whole-time are bound by the conditions of the contract, including the obligation to refrain from private practice.*

▭

IT is well known that their capacity to endure hardship made many of the great generals beloved of their troops. In days gone by Antony and Cæsar slept on the hard ground as did the humblest of their soldiers. By contrast, he who sleeps in a feather bed is despised rather than admired, and his comfortable sleep becomes an object of censure. It seems to us that the designer of H.M. Government beds has learnt this lesson well. " Those who sleep on H.M. Government beds shall not be comfortable " is an axiom that he has kept in the forefront of his mind. But not only has he decided against comfort, he has decided for amusement. " H.M. Government beds must have parlour tricks " he has made his second rule.

Examination of H.M. Government beds shows the skill with which they have been contrived. The sheets and blankets are good, the mattress is a masterpiece. Very careful measurements have

shown that an extremely heavy weight (*e.g.*, an elephant) depresses the Government mattress by an extremely small amount. Thus a very low co-efficient of elasticity is obtained. Similarly, careful measurements have shown that it requires a huge stress to elongate one of the springs of H.M. Government beds by a millimetre. This ensures a rigid structure. To avoid nursing difficulties the bed has been made as narrow as possible. Hence when the clothes are tucked in with the patient in any position, he is firmly pinned down and unable to cause further trouble till the bed is remade. Finally, to provide entertainment and to ensure that nurses and patients remember that war is in progress and nothing should take them by surprise, the bed has been made to collapse at the most unexpected moments. It stands fairly nicely by itself once it has been adjusted and patted into shape, but try to move it forwards and its head falls down; try to move it backwards and its tail falls down; and counteract both these tendencies and it digs its sharp iron feet into the floor and tears holes. Amusing, but not well-behaved.

It is hoped that these beds will diminish the stay of patients in them considerably, thus favouring a larger hospital turnover of patients.

▭

WE regret that no obituary of Dr. Beddard appears in the *Gazette* this week. A notice will be published in the next issue.

▭

A GRATIFYING letter, published on another page, draws attention to the function of the *Gazette* in affording one of the few remaining links with the Hospital to Guy's men on active service. Our correspondent suggests that the *Gazette* should publish from time to time a directory of Guy's men on active service. This cannot be done in any detail, of course, because of the regulations of the Censor's Office, but we hope soon to give a list of Guy's men serving with H.M. Forces. Meanwhile we repeat our request that all subscribers to the *Gazette* should inform us here of their change of address. If news of Guy's is welcome to Guy's men serving overseas, so are their experiences of interest to us at home. We invite anyone who has anything to say, which retains its interest after passing through the hands of the Censor, to send it to us for publication.

The Ætiology and Treatment of Some Common Diseases of the Face and Scalp

A Clinical Lecture by Dr. H. W. Barber

GENTLEMEN,—There still exists in the minds of many persons an idea that a disease of the skin, however harmless it may be and however æsthetically beautiful its component lesions may appear to an artistic dermatologist, is something of which to be ashamed, and indicative of uncleanly habits or even of immorality. Naturally enough a patient's distress and anxiety are far more intense if the disease occurs on uncovered parts, and such conditions as acne vulgaris, rosacea, sycosis and lupus erythematosus may produce in those who suffer from them an inferiority complex so severe as to entail even suicidal tendencies. I hope, therefore, that a discussion on the ætiology and treatment of some of the commoner diseases of the face and scalp may be helpful.

ECZEMATOID STREPTOCOCCAL ERUPTION OF THE SCALP

(*Fausse teigne amiantacée d'Alibert*)

This condition, which is fairly common, has received remarkably little attention in this country, and is seldom even mentioned in English and American textbooks. It is usually confused with ordinary scurf, seborrhœic dermatitis, psoriasis, or, as its French name would imply, ringworm. It may be widespread over the surface of the scalp, or localised, for example, to the vertex or supra-auricular parts. In the diffuse form practically the whole scalp may be covered with silvery white scales, which appear quite dry. But in places, and particularly when the eruption is localised to certain areas, the scales tend to be heaped together to form a white lamellar crust, which mats the hairs together, and, when the entangled hairs are lifted up, the scales become dissociated and are seen, so to speak, to climb up the hair-shafts. This is a very characteristic feature of the condition. When the superficial scales are scraped away, or when the lamellar crust is lifted up with forceps *en masse*, the underlying scales are seen to have a yellowish tint owing to their admixture with dried serum, and when these, too, are removed, the exposed surface of the epidermis has a smooth rose-coloured appearance, and gentle scraping will cause droplets of serum to exude. Thus the eruption is really eczematoid in nature, but the inflammation and the serous

exudation are so slight as to be concealed by the more superficial layers of parakeratotic squames, which, as has been said, appear quite dry and silvery, like those of psoriasis.

Diagnosis.—Once the condition has been recognised it can hardly be confused with anything else. The scales of ordinary *dandruff* (pityriasis simplex) have not the silvery appearance, and are usually somewhat greasy-looking with a slightly yellowish tint. Moreover they do not form thick crusts, nor do they enclose the hair-shafts in sheaths. In *seborrhœic dermatitis* there is inflammatory redness, and even the more superficial scales are distinctly yellowish or brownish from the admixture of dried serum. In *psoriasis*, although the scales are dry and silvery, they are coarser, and, after their removal, a red, dry surface is exposed with no serous exudation. In *ringworm* the scales have not the silvery tint, and the characteristic broken stumps are present.

Ætiology.—Cases of this eczematoid streptococcal eruption of the scalp can be divided into two groups. In one it is associated with streptococcal retro-auricular intertrigo, which is often accompanied by an infective dermatitis of the pinna and the adjacent parts of the scalp and neck. In the other group it occurs without any infective lesion of the skin.

Sabouraud states that streptococci can be cultured from the deeper layers of the squames, and, when this is so, the condition may be regarded as an eczematoid reaction to the local growth of streptococci. In my experience, however, although streptococci have been cultured in abundance from the neighbouring intertrigo, when present, cultures from "fausse teigne" have yielded only a staphylococcus albus, even when special media have been utilised.

In the second group of cases, foci of streptococcal infection elsewhere than in the skin are often found, and successful treatment of these may cause the eruption to disappear. I have seen it, for example, in association with a chronic sinus infection.

It would seem likely, therefore, that "*fausse teigne*" is, as a rule, a true eczematoid streptococcide, *i.e.*, an epidermal reaction to streptococcal toxin absorbed from a focus of infection either in the skin or elsewhere.

Treatment.—The local treatment of the eruption itself consists in removing the crusts and applying an ointment, such as :—

R.	Liq. picis carbonis	dm. 2
	Hydrarg. Ammon.	gr. 10
	Vaselin. alb.	dm. 2
	Ol. cocois nucif. to the ounce.	

Sabouraud recommends oil of cade.

If retro-auricular intertrigo is present, thorough treatment of this is, of course, essential. Otherwise a search for, and treatment of, chronic foci of streptococcal infection elsewhere is necessary.

ACNE NECROTICA SEU VARIOLIFORMIS

Sabouraud, in his excellent book "Diagnosis and Treatment of Diseases of the Scalp," devotes a chapter to a group of conditions which are met with chiefly in overfed men. As he rightly says, the majority of the eruptions of the scalp in men of middle age result from an excessive embonpoint and long-continued over-indulgence in food and drink. We are all familiar with the type of man he has in mind. He is the fat, seborrhœis type *par excellence*. He has lost his youthful figure, his abdomen protrudes partly from excess of fat and partly from flatulent distension of the intestines, his neck is thick and over-rides his collar, his face is red and often disfigured by a pustular rosacea, and his whole appearance suggests the plethora that the French word "*bouffi*" so well describes.

The conditions that Sabouraud associates with this type are (1) staphylococcal folliculitis with furunculosis of the nape of the neck, (2) sycosis of the occipital region, (3) cheloidal acne of the neck, (4) acne necrotica, and (5) seborrhœic dermatitis of the middle-aged and usually bald scalp. Of these I shall deal only with acne necrotica, the severer forms of which merit the alternative term "acne varioliformis," since the resulting pitted scarring may resemble that of small-pox.

Although this eruption is met with most commonly in men of the type I have described, it is also seen in women of similar habit, and sometimes in young people of both sexes. Even if, however, the subjects are not fat and plethoric, excess of carbohydrates and fats and insufficient outdoor exercise are usually important causative factors.

Clinically the lesions composing the eruption begin as follicular papules, surrounded by a red halo of inflammation; at their apices they develop vesiculo-pustules, which very rapidly dry up to form characteristic crusts. These are biconvex, yellowish-brown in colour, and firmly embedded in the skin. On the scalp they are seen to be centred by a hair, and when they fall they leave pitted scars, the depth of which varies according to the severity of the case. Usually small, the lesions may occasionally attain the size of a threepenny bit, and the resulting scars are then very disfiguring.

The sites of election are the scalp, the forehead

along the margin of the hair, the temples, the nose and naso-labial folds, and the presternal and interscapular regions. The eruption is essentially chronic, and progresses by the development of fresh crops of lesions.

The subjective symptoms are often out of all proportion to the objective signs. Even in cases in which the lesions are small and only visible on close examination, the patients may complain of severe itching, burning, and sometimes actual pain, so that they cannot bear the pressure of a pillow without discomfort.

The diagnosis is not difficult. The presence of multiple scabs at the orifices of the follicles on the sites already mentioned, the circular ulcers resulting from necrosis which are exposed when the scabs are removed with forceps, the pitted scarring from healed lesions, and the subjective symptoms are the chief points which serve to establish it.

Histologically the lesions are seen to result from necrosis at the orifices of the pilo-sebaceous follicles, involving the whole epidermis and a portion of the underlying dermis. This necrotic area forms the lenticular crust, in the centre of which are found the remains of the follicle, hair, and sebaceous gland. Lying in the infundibulum of the follicle are colonies of the acne bacillus, whereas at the ostium and along the upper and lower borders of the crust are masses of the staphylococcus aureus. The eruption, in fact, appears to be due to a superadded infection with a staphylococcus aureus of a follicle already infected with the acne bacillus, the necrosis, of course, being due to the staphylococcus. The predisposing factors have already been referred to.

Treatment.—The eruption usually yields quickly to suitable local treatment, but, unless the diet and mode of life are corrected, relapse is almost certain when this is abandoned. An ointment containing sulphur and oil of cade, or sulphur alone is usually effective, *e.g.* :—

R.	Olei Cadini	10.0
	Sulphur. praecip.	1.0
	Vaselini alb.	—
	Lanolini	*aa* 10.0

as advised by Sabourand, or—

R.	Sulph. praecip.	gr. 30
	Acidi Salicylici	gr. 15
	Vaselini alb.	dm. 2
	Ol. Cocois Nuciferae to the ounce.	

One of these should be well rubbed in at night and washed out the following morning. As a prophylactic against recurrence on the scalp a lotion containing perchloride of mercury and resorcin may be used daily, *e.g.*—

R.	Resorcin	gr. 10
	Hyd. Perchlor.	gr. one-sixth
	Acidi Salicylici	gr. 10
	Ol. Lavandulae	m. 3
	Ol. Ricini	q.s.
	Spt. Vini Meth. Indust. to the ounce.	

The dietetic treatment is for that of the seborrhœic state in general, and consists in reduction of the intake of carbohydrates and fats and of alcohol. Plenty of fresh fruit and green vegetables should be taken. In plethoric subjects the exhibition of alkalies for a while is advisable.

Finally, in resistant cases an autogenous or stock staphylococcal vaccine is sometimes successful.

SYCOSIS COCCOGENICA AND SEBORRHŒIC SYCOSIS

Those familiar with dermatological out-patient departments are aware of the difficult problem presented by long-standing cases of these conditions, but I think that the results of treatment in these days are far better than formerly, and I propose to discuss the ætiology and principles of treatment in considerable detail. Dr. Ingram of Leeds[1, 2] differentiates between what he terms "simple coccogenic sycosis" and "seborrhœic sycosis." The former he regards as "a simple dermatosis of the beard area alone, of external origin, due to the staphylococcus and favoured by irregular shaving," and he considers the treatment of it simple and its prognosis good. The latter, he points out, is really an eczematised seborrhœic dermatitis, often associated with involvement of parts other than the beard and moustache regions such as the eyelids, the scalp, ears, and joint flexures, with a superadded sycotic pustular folliculitis. He emphaises the involvement of the upper lip and the consequent "muzzle" distribution in these cases.

While agreeing with Dr. Ingram as to the clinical distinction between these two types of sycosis, I think there are intermediate cases, and that a chronic blepharitis may be associated with both types.

Ætiology.—The simple form of coccogenic sycosis is a staphylococcal infection of the hair-follicles of the beard region of males. The infection produces a pustule chiefly in the so-called infundibulum of the follicle, *i.e.*, the part lying between the opening of the sebaceous gland and the mouth of the follicle. It is rare for the deeper parts of the follicle to be involved. As Dr. Ingram remarks, the majority of cases occur among the hospital class of patient. He attributes this to the fact that they are apt to shave at irregular intervals, and he points out that hairy

surfaces which are allowed to grow a stubble of hair are liable to irritation and infection. Contributory factors are the presence of chronic infective foci in the skin itself, particularly of parts adjacent to the beard region, *e.g.*, fissures at the angles of the mouth and nostrils, impetiginous anterior rhinitis, and meatitis, and focal infection elsewhere, *e.g.*, in the teeth, tonsils or nasal sinuses. Moreover it must be remembered that this type of sycosis is sometimes a sequel to an attack of impetigo contagiosa, the secondary infection with the staphylococcus aureus that always occurs in this disease persisting long after the primary streptococcal infection has subsided. Hence the importance of thorough treatment and supervision of males with impetigo of the face.

As already pointed out, the clinical picture of so-called seborrhœic sycosis differs from that of the simple type. The underlying seborrhœic state, which was of such importance among our troops in France during the war, and the ætiology which I discussed at that time and later in my Lettsomian Lectures,[3] is of paramount importance. This state is characterised by what may be called a catarrhal condition of the skin and mucous membranes, so that their resistance to infection with organisms that are normally saprophytic is lowered. I believe that this catarrhal condition is dependent upon a " wateriness " or œdema of the tissues, *i.e.*, that there is retention of fluid with deposition of it in the skin and mucous membranes. In well-established cases of the seborrhœic state, although the fluid intake may be above normal, the urine is usually very concentrated and hyperacid, and, as was noted in the war, their tolerance of alkalies may be extraordinary.

I cannot here discuss all the factors that may be operative in the production of the seborrhœic state, but I think that the most important is the dietetic one, or rather the correlation between diet and mode of life. This was also the view of Sabouraud, and is confirmed to a great extent by Dr. Ingram. It is known that excess of carbohydrates and of fats tends to cause retention of fluid, whereas proteins, nucleoproteins, and some mineral salts have the opposite effect. In practice the usual fault found in the dietary of patients of the hospital class with severe manifestations of the seborrhœic state is a great excess of concentrated carbohydrate foods, such as sugar, white bread, and sweets, combined with a relatively deficient protein-intake, and a lack of fresh vegetables and fruit, and consequently of mineral salts. Doubtless also avitaminosis—particularly as regards Vitamins A, C and D—combined with an inadequate calcium intake, in these persons lowers the resistance of their skin and mucous membranes to infection. Among the well-to-do an excess of carbohydrates, fats and proteins may be taken, and, of course, over-indulgence in alcohol is often an important factor. Needless to say, a sedentary indoor life aggravates the effects of a faulty dietary.

In cases of seborrhœic sycosis met with in hospital practice I have been struck by the enormous intake of sugar to which the majority confess. Many of them consume large quantities of heavily sweetened tea, and I have had patients whose daily consumption of sugar, apart from sweets, bread, cakes, jam, etc., amounted to from 30 to 60 lumps or teaspoonfuls. With this they may drink six pints or more of tea, so that one finds a combination of a grossly excessive carbohydrate intake and a large consumption of fluid, which, of course, predisposes to fluid-retention.

Apart from the dietetic factor, Dr. Ingram lays great emphasis upon the presence of focal sepsis in the nasal sinuses, mouth and throat in these cases, and his observations show that there is often a direct, though obscure, relationship between a focus of infection and the sycosis. For example, a unilateral sycosis may be associated with an antrum full of pus on the same side, and the sycosis may disappear, at least temporarily, if the antrum be drained. The treatment of chronic sinus infection in these patients is, however, admittedly often unsatisfactory.

Treatment.—In the treatment of simple coccogenic sycosis Dr. Ingram stresses three essential procedures: (1) Daily shaving with a sharp razor; (2) the treatment of any infective lesions other than the sycosis; (3) the application of a caustic antiseptic lotion, which should be dabbed on and allowed to dry. He advises a strong preparation of the French Eau d'Alibour, *e.g.*—

R. Cupri Sulphatis ..... gr. 4
Zinci Sulphatis ..... gr. 6
Aq. Camphorae to the ounce,

which may be applied at night, a calamine lotion or liniment being used during the day. He quite rightly condemns the use of ointments, and epilation doses of x-rays. Small does of x-rays are, however, of value in the later stages of treatment. As regards shaving, I advise the following technique: The face should first be lathered with a superfatted soap and hot water, and, after bathing off the lather, a non-lather shaving cream should be freely applied to the wet skin, and the beard shaved with a very sharp razor which should be frequently dipped in hot water. After shaving, a boro-talc powder should be applied.

In resistant cases I am convinced of the value of a stock of autogenous staphylococcal vaccine given *intradermally*, not subcutaneously, in gra-

dually increasing doses. The dosage is determined by the degree of local reaction occurring at the site of injection during the subsequent twenty-four hours. So long as this is marked, the dose should not be increased. In this way the antibody-production by the skin is gradually increased.

The treatment of seborrhœic sycosis is far more difficult, chiefly because it is seldom possible for financial reasons to ensure a correct dietary, or to put the patient under conditions ideal for his recovery. The dietary should be of the anti-retentional type, *i.e.*, it should contain a relatively high proportion of protein and nucleoprotein, milk and plenty of fresh vegetables, cooked and raw, and of fresh fruit, whereas carbohydrates—particularly the concentrated forms such as sugar, sweets, cakes and white bread—and, to a less extent, fats, should be restricted. Among poorer patients it is advisable to supplement the dietary with cod liver oil and ascorbic acid, or with one of the mixed vitamin preparations, and calcium, *e.g.*, Syr. Calcii Lactophosph. B.P.C. One of the worst cases of seborrhœic sycosis that I have seen cleared up completely, except for a slight residual blepharitis, as a result of a radical change in his diet, and only soothing applications were employed locally.

When possible—and this, unfortunately, is seldom—the patient should live an active out-door live, preferably in a bracing climate.

If the urine is concentrated and hyperacid, alkaline diuretics should be given, and large doses may be required to render it dilute and neutral.

As already pointed out, the same lowered resistance to infection obtains in the mucous membranes as in the skin in these cases, and Dr. Ingram considers that focal infection of the mucous membranes is responsible for the sycosis in some 70 per cent. of cases. According to his observations there would seem to be in particular an association between sinus infection and the sycosis. Such an infection is often of the chronic low-grade type, and may require, for example, the Caldwell-Luc operation for its cure, apart from general after-treatment designed to raise the patient's resistance to infection.

(To be concluded)

The Starlings' Revue

THE last two revues have produced some excellent individual acts and some noteworthy innovations, but the general effect of the shows as a whole has been a little disappointing. One swallow does not make a summer, and a few good turns do not adequately compensate for several mediocre ones. It is to be hoped that succeeding shows will maintain the high standard of the early revues.

The chorus has more than fulfilled our expectations. We ask no more than that they should continue in their present style. Some of the sketches have been really witty. We remember with pleasure Mr. Hamilton as a harassed extern trying to open his bag with a hammer, and Mr. Hutton as an O.P.O. during the black-out. Hedley Atkins and Les Girls are an agreeable combination, sure to please.

The Works Department have shown considerable originality in their sketches, taking their parts with zest, but some of their slapstick would be more effective if shorter. We welcome them as a weekly feature.

Ritchie and Roy had a tremendous reception. Their cross-talk act and burlesque of " In Town To-night " were extremely clever. Proof of the value to the show of professional help was never more convincing.

How delightful is Hélène ! She has set us all humming those charming French songs, especially " Boum." We shall hope to hear her regularly. Pam Waters, too, is another old favourite who has reappeared.

Brian Johnson's impressions of various members of the staff reciting " The Charge of the Light Brigade " were very well done, and we envy the fortunate base hospital which is able to command his talent.

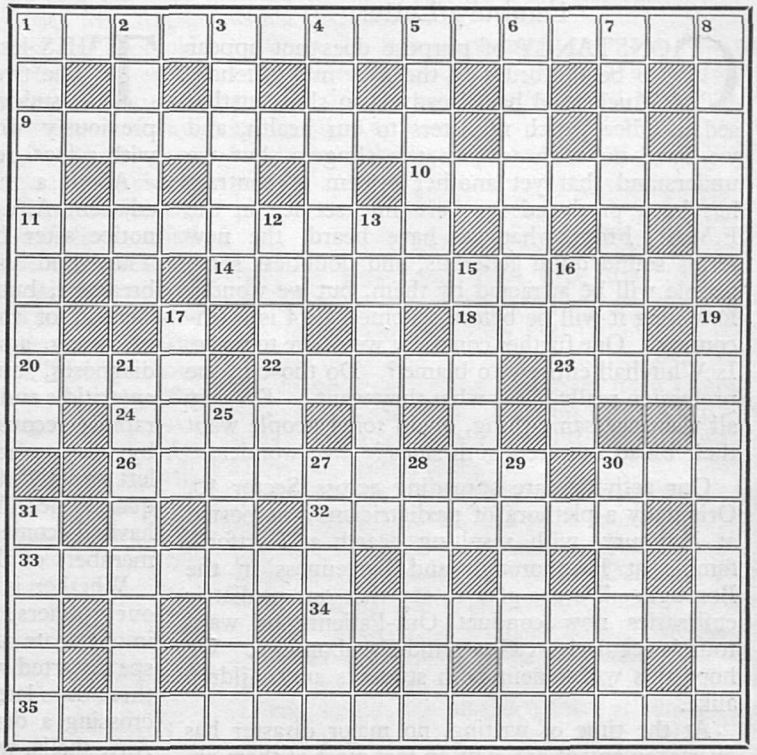
We are indebted to John Gordon for an original sketch, " Radio Calamities," showing the dire results of mixing together three separate wireless programmes, wherein the obstetric, the culinary and the political are closely intermingled. He has also reshaped the finale, so that it is now something of an act in itself and not a mere mechanical climax. The latest one took the form of a bar, in which Miss Evans and Jerry O'Gorman were barmaid and barman, the remainder of the cast being introduced as customers.

The producer, Tom Hills, and those associated with him have put on, week after week, with talent of varying merit at their command, a show without which Saturday night would be bleak and dull indeed. We thank them.

A. G. C. C.

Crossword No. 9

By "Pepsin"



ACROSS

1. Suitable places for sufferers from gun-fright? (2 words.)
9. Near colon? Its anagram is not!
10. Here's a hint. It might be a black fish.
11. Baby talk.
14. Shows things up. (2 words.)
18. Way of modern sex-appeal.
20. Almost greedy.
22. Psychologist.
23. Qualified.
24. Hit on the head.
26. When we think we are.
30. Scurf is twice as much.
32. Cost of a draught.
33. His sign is concerned with the appendix.
34. Refreshment, especially for bacteria.
35. Is this characteristic of a stone-mason?

DOWN

1. Makes the skin supple.
2. Pigmented circular spot.
3. A noisy confusion.
4. Astringent.
5. Granting.
6. Lasts two to five days.
7. Contented cow does.
8. Wavy swelling.
12. Amounts to the answer.
13. Pain in the ear.
15. Describes ripe wheat?
16. Opening for a girl.
17. South American alkali.
19. Birds make the sailor hurt himself.
21. Without him, we wouldn't be here.
25. Revile the entrance, as the German might say.
27. Disease started by housework.
28. Can an inmate have one?
29. Fate of goose and gander.
30. It's the Spanish in it which makes it catty.
31. Confuse with shame.

Notes. (No. 8.)

2. Jinto—joint out of place.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 12th December.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 8: A. Gordon-Taylor, St. Albans.

SOLUTION No. 8

M		D	I	S	L	O	C	A	T	I	O	N		O
O	T	I	C		E		O		H			Y	O	U
R		A	I	R	M	I	N	D	E	D		C		T
T	A	L	C		O		E		M		I	T	I	S
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F	E	V	E	R				A		I	N	L	E	T
Y		E		E		R	I	B		V		O		S
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C	A	P	O	N		E				S	C	A	L	E
A		O		A	S	S	E	N	T		A			D
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P		K		C	A	R	T	O	U	C	H	E		O
E	Y	E			L		O		M		O	A	T	S
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News from the Base

Pembury Letter

CONSTANCY of purpose does not appear to be the order of the Day in Whitehall. Much mud has already been slung at that sedate office which ministers to our health, and we have no wish to join the slingers, but we understand that yet another system of contract has been produced for part-time service in the E.M.S. From what we have heard, the new terms sound quite generous, and doubtless some people will be attracted by them, but we wonder how long it will be before scheme No. 4 is forthcoming. One further comment we desire to make. Is Whitehall entirely to blame? Do those in the profession really know what they want? Do they all want the same thing, or do some people want their bread buttered both sides? We wonder.

Our activities are spreading across Sector 10. Originally a plethora of pædiatricians was posted at Pembury, with resulting dearth at Dartford, famine at Farnborough and barrenness in the Borough. We are glad to say that our pædiatric emissaries now conduct Out-Patients or ward rounds regularly at Guy's and Farnborough. We hope this will benefit both students and children alike.

At the time of writing, no major disaster has overtaken any of our staff, in fact most of them are in blooming health, and we believe this country life is agreeing with us. We sincerely hope our long line of illness has at last come to an end. So far we have been little worried by the war, though there is considerable dissension among the inhabitants as to whether Hitler's real objective is the Pembury " exchange " or the waterworks!

This week we received a convoy of patients from Guy's, but most of them were in the convalescent stage. However, for the sake of appearances, one or two cases still required the attentions of our hungry surgeons. Nowadays even a herniotomy is not scorned by the highest of the high.

Our social life remains one of dignified calm. As yet we have not managed to pair off any of our surgeons with a local " lovely " in a comedy turn, but we still entertain hopes that " Cameron and Hughes " may top the bill as high-speed comedians, with perhaps a certain nephritis expert to act as a stooge.

Yes, life goes along quite happily, but to-day's *Telegraph* suggests things may be different next year. We don't think our appetite is quite as good as before we had read it.

N. M. J.

Orpington Letter

THIS letter contains the last month's news. The two series to events of most note are a sudden spate of entertainments in our previously work-a-day lives, and our contacts with a local regiment.

About a month ago thirty-five soldiers from adjacent A.A. battery came to us at very short notice after being poisoned by their breakfast. They told us that ninety of them had eaten breakfast, but only eight had toyed with lunch. Certain of their doctors whispered, " Mercury poisoning, arsenic poisoning," and other sinister diagnoses, but Dr. Colbeck tracked down B. enteritidis and staphylococcus aureus. Our guests rapidly recovered, only, alas, to fall victims, one by one, to scarlet fever. Those who have not left for the fever hospital are still with us in quarantine. We have enjoyed having them and have become friendly with them and other members of their regiment.

Whether it was the advent of Sister Marriott, our gunners, or some occult cause that resulted in our spate of entertainments I cannot say. The spate started with a successful dance, was followed three days later by a Heinkel reconnaissance plane crossing a distant portion of our sky chased by A.A. shells, which was followed a day later by an excellent show, which was in turn followed by another show, and ended with our attending a dance given by our friends the gunners. The dances were enjoyable, the shows deserve further comment.

The first show was given by nurses (in big print) and doctors (in little print, for indeed they contributed a minor portion). It entertained considerably more than the average good film and made us laugh ourselves into excellent tempers. Chief credit must go to Nurse Rowe for her excellent impersonations and acting and to Brian Johnson for his impersonations. But these two alone could not have made the show the success it was. The Orpington Buffs danced neatly, various sketches were played competently by our actress nurses, and Dr. Scott made a delightful compère. We rather think this show surpassed in excellence any we have seen in other parts of Sector X. The next day our gunners (those in quarantine) combined with us to give themselves a show, an equal success in a smaller way. Now Sister Evans is threatening us with a Christmas pantomime.

A few notes to end with. There is increased activity on our surgical front, genito-urinary and

orthopædic surgery being particularly active, though Mr. Kilpatrick determined on general surgery, persuaded an old ruptured man of ninety to strangulate his hernia so that he could repair the evil. It is rumoured that Mr. Epps, in league with Mr. Kilpatrick, stole the poor old man's truss and persuaded the Ward Sister to omit his linctus codeinæ and liquid paraffin. Dr. Scott has persuaded us, the Southern Railway, and is in course of persuading the Ministry of Health, of the necessity of running a railway siding into our hospital grounds. By this artifice the patient would be carried straight from the hospital train to the Orpington ward. The Parliamentary Secretary to the Minister of Health has visited us and we hope was impressed and will give Dr. Campbell all he demands. At least he was depressed by the "H.M. Govt." beds, those mechanically remarkable contrivances that, like the traditional British heavy-weights, lie down when called upon to move across the floor. Lastly, a few overdue welcomes—to Sister Marriott, who has been with us as our Assistant Matron for several weeks and whose energy and enthusiasm (especially dramatic) has already made itself felt among us, to Sisters Pratt and Surridge, who have come recently to us and to Drs. Reynolds and Halamandres who for some weeks now have livened our company of doctors, though Dr. Halamandres has temporarily left us.

E. B. R.

Dartford Letter

JOYCE GREEN HOSPITAL

ONCE more we resume the expurgated recital of trivialities that have ruffled our sheltered lives in this outpost of civilisation.

Although continuing to enjoy our own dances, we conducted a Sabine expedition into the neighbouring Southern Hospital in order to lighten the burden of the male inmates. Let us hope the pleasure we derived was mutual.

As to our own dances—the snow of authority seems to be melting, for an extension of half an hour beyond all previous experience was granted.

The London M.B., B.S. has bereaved us of an examining surgeon and several Houseman candidates. It is our fervent desire that the surgeon's *locum* should return to the Metropolis greatly benefited by his sojourn in the country. Steps are being taken to ensure this.

Almost daily convoys of chronic and convalescent soldiery and civilians arrive. To us has fallen the honour of deciding who among them will ever be fit for active service. A Medical Board from the War House prepares to pass judgment on our decisions.

Of excitement there has been none, save for an afternoon of heavy gunfire, the significance of which still escapes us.

When the new regulations of the E.M.S. are fully realised, no doubt there will be further anguish for our successor to record, but with the expiry of a three-months' contract we shall no longer be called upon to betray our colleagues in print.

J. S. C.

ORCHARD HOSPITAL

IT is time, and high time too, that some mention was made of those Dartford exiles of the Orchard Hospital.

This sanctuary requires some description. It was recently designated, in a letter from a patient's wife, as "a desolate collection of obsolete army huts." Not everybody would be so ready to make the best of things.

The Orchard lies snugly in misty marsh-land some half-mile from the main buildings. Each patient is expected to have enjoyed a wide experience of institutional care. Deafness is the rule, paraplegia a social asset, blindness a virtue and incontinence a *sine qua non*. Thither were sent into banishment some eight weeks ago three junior members of the Mess at Joyce Green. There, amidst the varied odours of senile decay, they spend their days. And their nights—what can be said of their nights? The social amenities are few. It seems likely that their nights are spent in sorrowful contemplation of the past, and longing for the future.

The huts which are used for the patients are heated by water-piping, but that of the Medical Officers is provided with radiators. And these are no ordinary radiators. Rather do they seem like specially constructed infernal machines. During quieter times the long grey hut, propped upon its trestles and jutting out into the winds that howl across the swamp, takes on the likeness of some proud battleship drawing into action. From the radiators around the walls ring out loudly all the sounds of conflict. The crash of cannon and the rattle of musketry mingle with the shrieks of the wounded and the gasps of the dying. From time to time great clouds of steam come belching forth as shell after shell batters her groaning sides. With each reverberating explosion the dauntless vessel leaps and shudders, then gallantly plunges on.

The Medical Officers were working for an examination, and it was evident that they could not last. Slowly the doctors found their sanity ebbing from them. First one of them started

climbing up the curtains. Then another barricaded himself in his bedroom and refused to come out, saying the Germans were after him. Tales were told of previous medical officers found screaming naked in the night, and of their subsequent rapid transference to the mental hospital at Bexley. There could be but one end. Every radiator in the place was turned off; and quietness fell.

The harassed three returned to cheerfulness and their right minds. Swathed in sweaters and overcoats, scarves and gloves, they do not pretend to be warm. But the silence is irresistible; the stillness after storm. Above the breakfast table their warm breath rises slowly in smoky columns, and through the frosty air is spread a most delicious peace. Of course, it's still getting colder.

I. S.

Farnborough Letter

FOR most of the past two weeks our wild surroundings have been lashed by wind and rain; the blustering rainy gales have almost washed the moon from the sky and have completely uprooted and devastated the marquee to which we had become quite accustomed. No one was ever quite sure why the marquee had been erected. Some even went so far as to suggest that its sole object was to make the Hospital look like a military objective and so decoy the bombers. But to the nurses it was a place where they had to deposit their weekly bundles of laundry, and now it is no more.

True, there remains a boarded floor and the gaunt, lonely framework of two doors, one at either end, completely unattached to the flapping canvas into whose vast belly they once gave entrance. But despite the lack of any sides or roof, these doors do not stand in vain; the nurses continue to open them and to place their laundry just inside and round the corner with determined gravity. And in this spirited refusal to allow Nature to make them break with tradition, they deserve and obtain our warmest admiration.

Convoys continue to arrive with loathsome regularity. Our noble students plod to and from with unquenchable *bonhomie* bearing the burdens of another hospital to the beds of ours, or rather to the beds that the Government have supplied to us. These beds themselves have been the subject of some considerable agitation, as apparently they collapse from time to time, mangling their occupants. The resultant injuries would seem to constitute a new horror of this war, for whose detailed description appropriate forms in triplicate will doubtless soon be issued by the Ministry.

On the social side our activities continue unabated. Last week we had a dance whose proceeds went to buying useful and acceptable gifts for the men on active service. Those of us who may shortly be joining them now that the three months' period of service in the E.M.S. is ended are eyeing such objects as Balaclava helmets and thick knitted socks with new interest.

For Messrs. MacLean and Price are departing for the Navy, and Mr. Stott with Mrs. Stott for the Colonial Medical Service, while Mr. Stafford-Clark goes into the R.A.F.; but before all these departures we face at Farnborough a week of intense social activity. This begins with our next, and for some of us our last, edition of the Farnborough Follies, carries on to a Residents' going-off party on the classical lines, a bachelor party on behalf of Mr. L. S. MacLean, to reach its climax on December 2nd with the wedding of Mr. MacLean to Miss Joan Hardaker, to both of whom we offer our very sincerest good wishes and congratulations.

Dr. Christopher Colbeck's is another name that makes news this time. For it appears that, although he has been at Downe Farm Laboratory since the outbreak of war, no official intimation of his change of address has been made public, and his mail has suffered as a result. While not wishing to disclose secrets of the circumstances of workers in field laboratories, we must acknowledge that for him to leave the palatial luxury of his residence, as he so often does, to pass the time of day here with us, shows a spirit of camaraderie on his part which is indeed admirable.

And now the writer of this letter must bid his readers *au revoir*. Further Farnborough news will be written by a successor, to whom, as also to those oncoming house-officers who will take over from us who are to leave, we yield our salutations. To Guy's everywhere then—*au revoir*.

D. S.-C.

Dental Letter

MANY members of the Dental School who came down to Tunbridge Wells on November 1st must have done so with misgivings. But we had been informed that a Clinic had been prepared and was ready for us; and so we thought foolishly of orderly lines of pump-chairs, gleaming sterilisers, rows of spotless basins and, outside the door, bench upon bench of chattering and excited patients. Thus we dreamed as we set out in the rain to find our new home, and our heated imaginations soared higher and higher until abruptly subdued by the sight of the building before us. It was a Baptist Tabernacle of plain red brick, very newly-built

and dominated by a tall brick chimney bearing on its summit a small replica of that iron cage-work so familiar to us at Guy's. We felt chastened, and threading our way past piles of hymn-books and a harmonium we penetrated to the top floor. And here the childish castles we had built in air tottered and crashed about our ears.

Rows of chairs there were certainly, and four wash-basins, but no water. These, together with a heap of wet shavings and two charladies, seemed to be the sum-total of our equipment. As we stared morosely at this spectacle, three men in dungarees entered the room, all walking slowly backwards in line. They moved across the floor in perfect unison, their hobnailed boots beating a funeral tattoo on the boards; then, bending at the knees, they laid some clanking object carefully at their feet. Of course! it was a length of gas-piping, greasy and contorted. We should have known. Sadly we turned away and tramped downstairs again. "Oh, well, they're getting on with it, anyway," ventured some cheerful soul among us.

For the next day or so we continued to be consoled by those words, and by watching a man bending lengths of piping and soldering joints at a bench outside. Then quite suddenly Professor Herbert arrived from nowhere and almost immediately started his own Clinic. Mr. Loader and Mr. Pringle took the remainder of us in hand, and we had a series of informal talks on this and that. These daily meetings, together with our morning coffee and excursions into the surrounding country, filled in our time until the arrival of our first batch of patients. They were evacuated schoolchildren, most of them rather bewildered and some crying. However, most of them now seem to prefer a visit here to a day at school, though they may, of course, be thus damning us with faint praise.

Since then, we have had a steady though microscopic influx of new patients, a few soldiers, and one or two of our old patients from Guy's. A bright new notice in golden letters has arrived at the entrance to attract the passer-by. Sterilisers and geysers have made their appearance inside. We have done our first extractions in the new gas-room, which was so tastefully decorated for the first few days with comforting and very appropriate texts in dainty frames—now, alas, taken down! Miss Ryan and Miss Brown are there to remind us of home, and we only need a few hundred patients to make us really happy.

At Sherwood Park, herculean efforts have been made on our behalf, and we believe that, apart from the inevitable grumbles about the cost and quality of accommodation and food, the arrangements there are proving very satisfactory. We think perhaps that even these complaints would vanish if we had more work to do. Lectures have commenced, the Mechanics' Laboratory, Phantom Head Room and Dissecting Rooms are in full swing, while Mr. Holland may be seen carrying on with Tooth-Carving as if nothing had happened. We are fast becoming accustomed to the somewhat unusual spectacle of Professor Fenn arriving at the door on a bicycle; indeed a bicycle is almost a necessity here.

We owe our special thanks to Mr. Loader for his gallant efforts in securing our equipment at the Clinic, including the enamelled hand-bowls that we use for spittoons; to Mr. Pringle for his fatherly presence among the children, and to that Czech refugee who yelled "Heil, Hitler!" as he came round from his gas.

When next we write we hope to be able to tell you that we are busy. The "will to work" has suddenly become outstandingly apparent in our midst; only the material upon which to work is lacking. Meanwhile we continue to enjoy the merry hours of black-out, the glorious cycle rides up the wind-swept hills, and the sting of rain on our faces as we splash our way up the drive to Sherwood Park. "ODONTOME."

Nursing News

"Oh, to be in Orpington, now that Guy's are here,
And whoever wakes in Orpington—"

MY apologies to Browning, but at last, at long last, Orpington has reared its slumberous head and now, like a lion let loose, it rushes pell-mell through the streets of gaiety!

It all started with the advent of Sister Marriott, our Deputy Matron. (How glad we are to have her!) With her unbounded vitality she whipped around and in less time than it takes to tell we were breathless, on tip-toe, pirouetting through dances held in the strong arms of the Army and Dr. Campbell; smashing our way through hockey matches; listening rapturously to gramophone recitals; and last, but not least, a Concert. And what a concert! It put the Windmill Theatre in the shade with its girls. How Mr. Doherty clapped and roared for more!

We had a star. Imagine Zasu Pitts and Gracie Fields all in one scintillating across the footlights. Yes, we hand the goods to Miss P. Rowe and her colleagues. To combine the stately art of nursing with that of variety entertainment, to set the Intelligentsia of Guy's at Orpington laughing and holding both its sides, is nothing short of genius.

Oh, ye gods and little fishes,
If I am dreaming
Let me not awaken! M. E. F.

Correspondence

Royal Medical Benevolent Fund

To the Editor of the GAZETTE

SIR,—Many members of the profession have most generously supported the appeal made each year for donations towards the Christmas Gift Fund of the Royal Medical Benevolent Fund.

In the years of peace this special work of ours in bringing extra comfort and pleasures on Christmas Day into the homes of old people, directly connected with our profession, has obviously appealed to the hearts and sympathy of many of your readers.

In this year of War, may I through you, Sir, ask the question—is the Fund to give its usual gift at Christmas, 1939, or are these old people to receive nothing at a time when they may be suffering from greater privations and difficulties?

I am very confident that the reply will be that this is not the year to withhold the gift which means so much happiness and brings such great pleasure to many old and infirm people.

I invite those who can contribute to send donations to the Royal Medical Benevolent Fund, Christmas Gift Account, Wormingford, Essex.

Although many members of our profession have been hard hit, yet I have every hope that the response will be a generous one.

Yours, etc.,

THOS. BARLOW,

Wormingford, Essex. *President.*

Temporary Addresses of Guy's Men

To the Editor of the GAZETTE

SIR,—The present situation has caused a great many Guy's men to be suddenly divorced from their surroundings and particularly from Guy's itself, and to them the *Gazette* forms one of the few remaining links with the Hospital.

While they doubtless still appreciate the clinical papers published therein, the items of Hospital news are even more welcome than before.

One is frequently meeting Guy's men of one's acquaintance in most unexpected situations, and such news that has filtered through is freely discussed.

Would it be possible to extend the space devoted to such information, and could some attempt be made to publish from time to time a kind of directory which might indicate the location or activity of Guy's men in their new circumstances?

It not infrequently happens that old acquaintances are found to be working within a few miles of each other unknown to either, whereas contact might be established through the medium of the *Gazette*.

Yours, etc.,

B.E.F. "TEMPORARY GENTLEMAN."

Miss Holland's Resignation

To the Editor of the GAZETTE

SIR,—I should like, through your columns, to thank the many friends who have written to me on my resignation from Guy's, and to express my appreciation of the kindly thoughts and generosity of the Guy's Sisters and Nurses who sent a lovely coffee service to greet me on arrival at Cambridge.

I look forward to meeting Guy's friends again, and I hope that very soon they will be in their usual home.

Yours, etc.,

DOROTHY L. HOLLAND.

Addenbrooke's Hospital, Cambridge.

House-Officers in Last War

To the Editor of the GAZETTE

SIR,—Mr. A. R. Thompson's opinion of the house-officers of the last war—"conceited, idle and incompetent"—may perhaps help to explain the somewhat unco-operative attitude which he adopted while he lived in the College as Acting R.S.O. during the war.

Yours, etc.,

AN EX-HOUSE OFFICER OF 1917.

Guy's Hospital, S.E.1.

Sport and Hospital Information, etc.

Rugby

Guy's v. Metropolitan Police

(At Honor Oak Park on Saturday, November 4th.)

THE Hospital accomplished their best performance of the season when they defeated the Metropolitan Police, one of the strongest sides in London, by 4 placed goals, a dropped goal and a penalty goal (27 points) to a placed goal, a dropped goal, and 2 tries (15 points).

Earlier in the week Guy's were overwhelmed by Cambridge University, but in spite of this reverse, only two changes were made in the pack. Both sides played attractive open football, and the

game was enjoyed by spectators and players alike. Once again Van Steytler was outstanding, and in Vann, who was deputising for Halamandres, he found a capital partner.

The Police were much the heavier side, but the Hospital pack played a magnificent game and more than held their own. In the set scrums they were complete masters, and Osmond repeatedly outhooked his opposite number.

The ground was in excellent condition and, with the sun and breeze behind them, the Police launched the first attack and nearly scored when Pridmore found an opening, but Charlton brought him down near the corner flag. Guy's retaliated immediately with a glorious movement which was carried out at top speed from one end of the field to the other. Crawford just failed to reach the line, but Guy's took the lead soon afterwards when the forwards heeled from a five-yards' scrum and Van Steytler coolly dropped a goal.

The Police quickly recovered from this shock, and a combined effort between Pridmore and Webber ended in the latter crossing the Hospital line for McGrath to add the goal points.

Both sides were playing attractive football, and there was never a dull moment for the rest of the game. After Mullins had kicked an excellent penalty goal, Guy's went further ahead when Crawford finished off a magnificent bout of passing between Steytler, Kynaston and Babrow. This movement was rugby at its best, and the crowd did not hesitate to show its appreciation.

Kynaston kicked the goal after no charge had been given, but the visitors quickly reduced the arrears when Webber scored an unconverted try.

Guy's had to fight hard to retain their lead, but towards the interval they gained the upper hand and, after Charlton had made a long run to the visitors' 25, he cross-kicked and, following snappy passing between the forwards, Albers scored behind the posts for Kynaston to kick another goal.

The Police were by no means finished, and after Guy's had been driven back to their 25, Webber dropped a goal when the whistle sounded for half-time.

The second half was just as exciting, and from the re-start the Police went all out to reduce the arrears. Only expert tackling kept them out, and on one occasion a score appeared certain when one of their forwards knocked on in front of the posts.

Having recovered from these shocks, Guy's pulled themselves together and once again the threes came into action, when Steytler cut through and Kynaston made a great run before sending in Crawford for another try, which Kynaston converted.

After the Police had responded with a well-deserved try by Jones, Guy's made the result safe when Babrow caught the defence on the wrong foot, cut in between the opposing centres, and scored a fine try for Kynaston to add the goal points.

Team.—T. L. T. Lewis; J. P. Crawford, R. U. F. Kynaston, L. Babrow (captain), D. W. F. Charlton; J. van A. Steytler, R. N. H. Vann; M. R. Mullins, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, T. W. Renton, A. G. A. Albers, C. S. Darke.

Guy's v. Rosslyn Park

(*At Old Deer Park, Richmond, on Sat., Nov. 11th.*)

THE large number of spectators who turned up for this match were rewarded with another capital game, and although Guy's lost by 2 placed goals and a try (13 points) to a try (3 points), they had quite as much of the game as their opponents, and were unlucky to lose.

In the first minute Vann broke away from a loose scrum and made a splendid opening for Van Steytler, who went clean through the defence and appeared certain to score when Unwin brought him down a yard from the left-hand upright. The ball slipped out of Van Steytler's hands and Penman managed to clear. It was a lucky escape for the Park, and had Guy's scored at this stage it might have made all the difference to the game.

The Park fielded a strong pack, which included V. W. Wilson, captain of the Australian XV, but the Hospital forwards put up a splendid fight and more than held their own.

In spite of the heavy going, play was very fast and both sides handled the greasy ball with accuracy and skill. The Hospital back division carried out some excellent movements, but Reichwald, Roberts and Spriggs tackled magnificently and saved their line repeatedly.

Guy's took the lead after 25 minutes, when Babrow broke through and, when hard pressed, kicked across to Crawford, who won an exciting race for the touch-down. Actually one of the Park three-quarters reached the ball first, but he fumbled it and Crawford scored near the corner flag

Following this reverse the home side pressed heavily and a grand forward rush carried play to Guy's 25. They secured the ball from three scrums, but their movements broke down and it looked as though Guy's would keep their line intact, when Spriggs sent out a long pass to Unwin, who ran in for an unconverted try.

In the second half, with the slope of the ground and wind in their favour, the Park relied on long kicks to touch and forward rushes, but Guy's were equal to all demands and kept their opponents at bay.

Babrow and Van Steytler made several spectacular openings, but unfortunately they had nobody with the pace of Unwin, the English International, to support them, otherwise Guy's would have scored on several occasions.

Unwin made full use of the few opportunities that came his way, and ten minutes after the interval he gave his side the lead when, after a run of 60 yards, he scored a grand try behind the posts and Priest added the goal-points.

A few minutes later the Park increased their advantage when Herbert, their scrum half, obtained possession following a scrum in the Hospital's 25, and was over the line before the forwards had realised what had happened. Again Priest added the goal-points.

Guy's never gave up trying, and some of their movements deserved a better fate. Towards the end they pressed heavily, and it appeared as though they would score any moment, but although Charlton and Crawford ran strongly they were unable to avoid the close attention of Unwin, Penman and Reichwald.

Team.—T. L. T. Lewis; J. P. Crawford, R. U. F. Kynaston, L. Babrow (captain), D. W. F. Charlton; J. van A. Steytler, R. N. H. Vann; M. R. Mullins, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, T. W. Renton, A. G. A. Alberts, C. S. Darke.

Guy's v. Farnborough

A KEEN game was played at Honor Oak Park on the 15th of November between Guy's and the Farnborough and Orpington Unit, resulting in a win for Farnborough by a goal, a penalty and a try (11 points) to nil. The ground was heavy, but, despite a rain squall, the three-quarters handled well.

McClintock won the toss and kicked off with the wind. Guy's heeled well and Lillywhite kicked ahead, but the Farnborough forwards covered well and foiled a dangerous movement. Guy's made several forward rushes, heeling well from the loose scrums, but their half-backs had difficulty with the wet ball.

Although Guy's packed well, Sharpe managed to win most of the set scrums. Sharpe was also conspicuous in the loose rushes controlling the ball well.

Farnborough forwards attacked, but were sent back by Buck, who was fielding and kicking well. a short passing movement between Mullins and Maxted broke down when Maxted was brought down just short of the Farnborough line.

Farnborough pressed hard and a penalty was awarded under the posts against a Guy's forward. McClintock kicked an easy penalty (3—0). Shortly afterwards the whistle went for half-time.

Soon after the resumption Lewis and Joyce, who had an excellent understanding, broke away with Douglas in support. Douglas was brought down, but Albers picked up and crossed for McClintock to convert with a good kick (8—0).

Burgess, who was playing well, sustained a knee injury and the Farnborough forwards packed 3—4. Despite this loss, Edward broke away from a line-out and scored, McClintock failing with a long kick (11—0).

The best movement came in the last minute, when Lewis sent Joyce away on the blind side. Joyce side-stepped a Guy's forward and Leeming was up for the pass. He was about to be forced into touch when he passed inside to Joyce. Joyce passed to Douglas, who had a clear run, but unfortunately he failed to hold a difficult pass.

The best features of the game were the deceptive running of Joyce and the hooking of Sharpe. Birks and Huntly ran and tackled hard. Buck, another player who has graduated from the hockey field, fielded and kicked well.

J. C. B.

Hospital Information, etc.

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Death

PARKE.—On Monday, November 13th, 1939, at 12, Ceylon Road, Westcliff-on-Sea, Charles James Parke, M.R.C.S., L.S.A. Aged 83.

EDS. { W.D.B. / E.B.R.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

THE E.M.S. was first organised mainly to deal with air-raid casualties. As yet we are still ignorant of what will be required of the E.M.S. should bombing attacks on towns be made. We can only rely on guesswork and the experiences of others and shape our organisation from both of those. Recently Dr. Trueta,* who was chief of the Surgical Clinic in the Hospital General de Catalunya in Barcelona during the Spanish Civil War, and who had experience of over 340 air-raids, has spoken and written of the injuries inflicted by bombs and the organisation necessary to deal with those injuries. His experiences and views deserve close study. Unfortunately for us, he had no experience of gas bombs, gas spraying or incendiary bombs, all of which may fall to our lot.

His description of bombing attacks on Barcelona are instructive. To destroy buildings and fortified places heavy bombs (*e.g.*, 750 lb.) were used. Because of their weight only a few of these bombs can be carried by an aeroplane, and they bury themselves deeply in the ground. Thus on exploding their fragments and explosive blast are directed upwards rather than laterally. They possess great destructive power and injure in two ways. The flying fragments wound, often mortally, civilians in the head, chest and upper abdomen (because the fragments tend to fly upwards), and when not mortal such wounds are very severe and accompanied by much shock. The explosive blast of the bomb causes the collapse of buildings and crush injuries to the occupants. Such crush injuries usually result in much damage and shock, made worse by the delay required for extricating the injured from fallen masonry. Treatment is very urgent and mortality high for both types of wound caused by heavy bombs.

To injure and terrorise civilians light bombs were used. A single aeroplane can carry many of these and, as they are light, they scarcely bury themselves. Thus the direction of their propelled fragments is lateral. These fragments are small, splinter-like, and travel at great velocity. They cause multiple wounds, more often in the legs and abdomen than elsewhere. Externally these wounds may appear small and not severe, but the small bomb splinters do much internal damage and may start considerable hæmorrhage. Shock is common. Treatment is again urgent. Dr. Trueta insists that because of the urgency of surgical treatment for wounds caused by both types of bomb, the injured must be taken immediately to a hospital, not delayed by being sorted at a first-aid post.

An air-raid or series of air-raids that were successful would result in the production of a great number of casualties requiring very urgent treatment. Air-raids (unless continuous) provide essentially short bursts of very high-pressure activity. It is interesting that in Barcelona during such bursts of high-pressure work medical practitioners were pressed into hospital service. The question we must ask ourselves is : How many of our hospitals in areas likely to be raided are sufficiently replete with receiving room and surgical staff to be able to treat the inevitable scores, perhaps hundreds, of wounded without serious delay ? We wonder.

CASUALTY lists may as a general rule move us little except to a realisation of the futility of war. Our grief becomes much more real and personal when we find within those lists names known to us. Thomas Francis Todd was killed in a motor accident on active service in France. He had what might truly be called a brilliant career. He qualified at Guy's at the age of twenty-three, and a year later had passed his Final F.R.C.S. He

* J. Trueta, *Proc. Roy. Soc. Med.*, xxxiii, 13 & 65.

later obtained his M.S. and specialised as a consultant gynæcologist. He was awarded two Hunterian Lectureships for his research on the relief of pain (1936 and 1939). We publish in this issue an appreciation of his personal character by a friend who knew him well.

We regret to announce also the death of Frederick Herbert Weston, who lost his life in the courageous last battle of the *Rawalpindi*. He qualified Conjoint in 1934 and passed M.B. in 1935. He had passed the Primary F.R.C.S. in 1931. He acted as *locum* H.P. to Dr. Ryle, and has held various House appointments in London and Provincial hospitals. Some of us remember him as "Freddy," and we shall always remember and respect the sincerity of his character.

WE are including our first Guy's Letter in this number of the *Gazette*. As so many of our readers rarely get to Guy's, we hope thus to keep them informed of what is happening here. Guy's does not entirely consists of shows, dances, and dugouts, as some have thought.

Obituary

A. P. BEDDARD, M.D., F.R.C.P.

ARTHUR PHILIP BEDDARD, Consulting Physician to Guy's Hospital, died suddenly on November 8th at Sandiway, Cheshire, at the age of 72. He was the son of James Beddard, F.R.C.S., of Nottingham, and was educated at Shrewsbury and Trinity College, Cambridge. At Cambridge he took a First in both parts of his Natural Science Tripos and then in 1891 turned to Medicine and entered Guy's. On qualifying, he became Demonstrator of Physiology at Guy's under two great physiologists, first E. H. Starling and later M. S. Pembrey. With these two he worked on problems of respiratory and kidney physiology. As a result of this work his approach to medicine was fundamentally physiological. At the same time he lectured in pharmacology. In 1902 he was appointed Assistant Physician to Guy's, having previously been made Assistant Physician to the West London Hospital. He continued as physician here till his retirement in 1927.

There were two sides of Beddard, the side seen by those who, though perhaps seeing him often, never penetrated his reserve, and the side seen by those who knew him well. He was a shy man and took little part in hospital politics. On the other hand, he never missed his teaching rounds and was an excellent and witty teacher. His clinical observation and careful examination were noted, expecially his mastery of the physical signs of the chest. Those who knew him well—and it took time to get to know him well—found him an excellent companion, a good friend, and a physiologist and physician of clear and original mind, critical of jargon and clouded thinking.

Beddard was appointed Chairman of the British Pharmacopœia Commission in 1928 and was thus responsible for the sixth British Pharmacopœia published in 1932. In 1896 he married Evelyn Maud, fourth daughter of the first Lord Allerton, and is survived by his wife, son and daughter, to whom we extend our deepest sympathy in their loss.

MAJOR T. F. TODD, M.S., F.R.C.S., M.C.O.G.

THE news of Todd's death in France on December 1st has overshadowed for many of us this week the more impersonal tragedies of war. I am not qualified to speak of the loss which it has brought to his own special field. It was evident that he had laid the foundations of a brilliant career in gynæcology and that his reputation was rising steadily higher. It is, however, as one among his friends that I would like to pay a tribute to his memory.

He possessed, to a remarkable degree, the qualities of vitality, courage and sincerity. These he gave unsparingly both to his work and to his friendships. It was a delight to work with him on any problem, however small, and his determined approach to all difficulties was a constant source of inspiration. It was equally a pleasure to turn to lighter matters in his company, for the qualities which gave him success in his work brought him also a vigorous enjoyment of life. There were no compromises or half-measures in his nature, and whatever he did, he did it to the full.

By his death it is as if a bright light were put out. There are many who will be aware of the shadows which this has left.

C. H. R.

CHARLES THOMAS KNOX-SHAW, M.R.C.S.

MR. KNOX-SHAW qualified at Guy's in 1877. After a short time in practice in Hastings he returned to London in 1886. He was ophthalmic surgeon to the London Homœopathic Hospital and surgeon to the Buchanan Hospital, St. Leonard's, the Tunbridge Wells Homœopathic Hospital and the Phillips Memorial Hospital at Bromley. Since his retirement twenty-five years ago he has lived at Oxford. He died on November 23rd at the age of 84.

CHARLES JAMES PARKE, M.R.C.S. (Eng.), L.S.A.

DR. PARKE died suddenly at his home in Westcliff at the age of 83 years. He qualified at Guy's, and sailed to Australia as ship's surgeon in 1883. On his return he went into practice at Bromley, Kent, until 1919. He has since lived at Westcliff, where he has worked until the time of his death, and he became a figure well known throughout the district, both within and beyond the profession.

The Ætiology and Treatment of Some Common Diseases of the Face and Scalp

A Clinical Lecture by Dr. H. W. Barber

(*Concluded*)

ROSACEA AND ROSACEOUS TUBERCULIDE

Rosacea—often called acne rosacea—is one of the commonest conditions that the dermatologist is called upon to treat. Clinically, I think, two main types may be recognised—the active or "dyspeptic," and the passive variety. In the former the affected area is bright red, and the flushing is intensified by indigestion, hot drinks, exposure to heat, or emotional disturbances; in the latter there is passive congestion, so that the colour is bluish or purple, and exposure to cold is the chief aggravating factor. The passive form is also, of course, seen in those with chronic cardiac or pulmonary disease. In both forms, however, circulatory disturbances are common, in that the peripheral vasomotor tone is unstable. The extremities are often cold, or alternately hot and cold, and women particularly complain of their fingers "going dead." In the passive form a "chilblain circulation" is the rule, and the rosacea may be merely part of this, there being stasis in the superficial vessels of the nose and malar regions on exposure to cold. This is, of course, ætiologically distinct from true rosacea, although the two may co-exist.

I shall now confine my remarks to the active or "dyspeptic" form of rosacea. In the early stages there is merely periodical flushing of the central part of the face (the rosaceous area), *i.e.*, the centre of the forehead, the nose, the malar regions and the chin, which occurs chiefly after meals and on a change from a cold to a hot environment. The flushing, at first intermittent, becomes permanent, and eventually telangiectases may appear. The majority of persons with rosacea are seborrhœic, and sooner or later the rosaceous area becomes secondarily infected with the seborrhœic triad of organisms, particularly the staphylococcus albus, which produces inflammatory papules and pustules; there may also be scaly patches due to the pityrosporon, which spreads downwards from the scalp, and comedones caused by the acne bacillus, so that the term "acne rosacea" may sometimes be merited. The staphylococcal pustulation is usually superficial, and disappears after suitable treatment without trace, but in some cases it may be intense and deep, leading to permanent scarring. In long-standing cases of rosacea the condition known as rhinophyma may arise. It is seen most commonly in alcoholic men, whose employment exposes them to cold winds. The nose becomes covered with large, lobulated or pendulous protuberances, separated by deep furrows; their colour is red to deep violet, and their surfaces are traversed by dilated veins and pitted by the dilated follicles of the enormously hypertrophied sebaceous glands. In many patients with rosacea subjective symptoms of dyspepsia are absent. Others complain of fulness after meals, flatulence, heartburn and nausea.

Ocular Lesions.—A very important complication of rosacea is the occurrence of ocular lesions, which are met with in about 15 per cent. of cases. Chronic blepharitis, however, which is so common in seborrhœic subjects, is seen with greater frequency.

The ocular lesions may be classified as follows :—

1. Simple dilatation of the conjunctival vessels, the conjunctivæ being included in the rosaceous area of the face.
2. Phlyctenular conjunctivitis.
3. Corneal ulceration, resulting from the breaking down of phlyctenules.
4. Diffuse keratosis.

The last three are evidently the result of a pyogenic infection, comparable to that which occurs on the skin of the rosaceous area, but there is not necessarily any parallel as regards the intensity of the two, and occasionally the eye-lesions may precede the active manifestations of rosacea. Although successful treatment of the latter usually leads to a cessation of the ocular inflammation, the corneal ulceration may be severe and intractable, and the resulting scars may cause permanent impairment of vision.

Ætiology.—Although the factors predisposing to the active form of rosacea may be multiple, I think one may say that in the majority it is of gastric origin. Shone and Whitwell,[4] working in my clinic, came to the conclusion that the immediate cause of the reflex flushing of the rosaceous area is an increase of tension in the wall of the stomach, which may be due to :—

(*a*) Delay in emptying.
(*b*) Feeble peristalsis.
(*c*) Hypotonia, which renders the stomach liable to distension.
(*d*) Over-rapid peristalsis.
(*e*) Gastric spasm.

Consequently anything which produces gastric distension, such as bulky, insufficiently masticated meals, white bread, and a large quantity of fluid, or which interferes with normal, regular peristalsis, will provoke the flushing. Contributory factors, of which there are many, *e.g.*, menstruation, the menopause, painful disorders of the female pelvic organs, chronic infections, and psychological disturbances such as the anxiety state, probably owe their effect to their action on the gastric tone. Wingate Todd has shown that prolonged anxiety causes hypotonicity of the stomach and inhibition of peristalsis, and that a similar condition occurs in women during the premenstruum.

It is uncertain in what proportion of cases of rosacea a true gastritis is present. Personally I think it is higher than is usually thought, and Dr. Lintott is now examining a series of cases for me with the gastroscope. Since Ryle and I published our observations many years ago, the results of fractional test-meals in patients with rosacea have been recorded by many observers. In our small series of cases we found hypochlorhydria or achlorhydria in a considerable proportion, and we noted the beneficial effect of hydrochloric acid taken during or after meals. It has now been established, however, that there is no correlation between the gastric acidity and the rosaceous tendency, since the secretion of hydrochloric acid may be absent, deficient, normal or excessive. Although the administration of hydrochloric acid is often of striking benefit, it may be equally so in cases with hypochlorhydria and with a normal or even excessive secretion of acid. Its action, therefore, probably depends upon its influence on the gastric tone and peristalsis. Alkalies, given before meals, and carminatives doubtless act in the same way.

The rosacea of chronic alcoholics and of those who drink strong tea to excess may be partly due to gastritis, partly to hypotonia and distension of the stomach by large quantities of fluid, and partly to aggravation of the flushing by alcohol or hot fluids.

Treatment.—Every case of rosacea must be considered as a separate problem, and a careful consideration should be given to the factors that may be operative in the individual patient. It is important to determine whether a true gastritis is present by means of the fractional test-meal and, if possible, by gastroscopy. If there is definite evidence of chronic gastritis, preliminary treatment by washing out the stomach with a weak solution of hydrogen peroxide in the early morning should, if practicable, be given. Such a gastritis may be of infective origin, and oral, tonsillar and sinus infection must be sought for and treated. An x-ray examination of the stomach and intestinal tract is always desirable.

Dietetic treatment is of paramount importance. The patient must avoid heavy and hurried meals, and should eat slowly and masticate thoroughly. Fluids should be taken between rather than with meals. All foods which tend to distend the stomach should be taboo, *e.g.*, white bread, which, as has been shown in a patient with a jejunal fistula, forms large doughy lumps, milk and suet puddings, heavy cakes, pastries and porridge. All starchy foods should be taken in a form which compels mastication, crisp wholemeal toast, Vita-weat or Ryvita being substituted for white bread, and concentrated sweet-foods and fried dishes should be avoided. Alcoholic drinks should be taken sparingly with meals, or not at all, and strong tea and coffee and other hot drinks should be forbidden.

As regards medicinal treatment, alkaline and, as a rule, acid mixtures, both of which increase the gastric tone and stimulate normal peristalsis, are of value, and in most cases the best results are obtained by giving an alkaline bitter mixture before meals, *e.g.* :—

R. Sod. Bicarb. ..... gr. 20
Tinct. Nuc. Vom. ..... m. 8
Tinct. Zingiberis ..... m. 30
Aq. Chloroformi to the ounce;

and dilute hydrochloric acid m. 20-30 in water either during or immediately after meals. In some cases a bismuth and soda mixture before meals is more effective than the above combination.

The possible influence of physical and nervous exhaustion, psychological stress and an uncongenial environment must always be considered, and judicious psychotherapy may be advisable in some cases.

In women with menstrual irregularities, and during the menopause, ovarian preparations should be given.

The local treatment must depend upon the degree of secondary infection of the rosaceous area. If this is absent or slight, a weak ichthyol cream or paste, applied at night, and a calamine lotion during the day, are all that is necessary. In cases with much pustulation a sulphur or mercurial paste, *e.g.*—

R. Sulphur Præcip. ..... gr. 10—20
Zinci Oxidi .... dm. 1
Kaolin .... gr. 15
Adip. Benzoat, to the ounce;

or

R. Hydrarg. Ammon vel. Hydrarg. Oxid. Flav. ..... gr. 10
Pasta Zinci Co. B.P. to the ounce;

may be applied at night. If these are not well tolerated, a 2 to 4 per cent. ichthyol paste may be substituted. It is important to treat the scalp if, as is usually the case, it is heavily infected with the pityrosporon. Dilated venules may be destroyed by electrolysis, and small doses of x-rays are sometimes of value. The local treatment of rhinophyma is surgical, the hypertrophied skin being removed with the knife.

ROSACEOUS TUBERCULIDE

Although not very common, this condition is of importance owing to the fact that even by dermatologists it is often mistaken for the secondary papulo-pustular eruption that occurs in the simple form of rosacea. It was first described by Lewandowsky, and I have seen several cases during the last few years. It may be regarded as a papular tuberculide occurring in patients with a tendency to rosacea, the lesions involving chiefly but not entirely the rosaceous area. As a rule, in my experience, the underlying focus of tuberculosis is in the bronchial glands.

The lesions consist of small papules, sometimes but not always follicular, and irregularly distributed; they may be discrete or grouped in patches. Their colour varies from bright red to brownish yellow. On vitropressure they resemble lupoid nodules, unlike the papules of ordinary rosacea. Some of them may become pustular, but the pustules are small and superficial and situated at the apices of lupoid papules. The degree of rosaceous flushing and of telangiectasia varies.

The lesions persist for a considerable time, and then slowly undergo involution, either leaving no visible trace or small pitted scars.

The diagnosis from papulo-pustular rosacea is sometimes difficult, the main points being as follows: the lupoid appearance of the papules, both with and without vitropressure; the fairly frequent involvement of the lateral parts of the forehead and cheeks and of the neck; oily seborrhœa, usually present in rosacea, is, as a rule, absent or slight, and the tendency to pustulation is much less, the pustules, when present, being small and superficial; the histological structure of the lesions; and the sensitiveness of the skin to tuberculin (intradermal and Moro tests), but this may be slight.

Micropathology.—In chronic indurated papules of ordinary rosacea a tuberculoid structure with occasional giant-cells is sometimes formed as a reaction to broken-down follicles and sebaceous glands. In rosaceous tuberculide even minute and recent papules reveal circumscribed tuberculoid infiltrates, lying just below the epidermis with giant-cells here and there. They may be perifollicular, or around a sweat-duct, but are often independent of the glandular appendages, unlike those of rosacea.

Treatment.—As has been said, patients with rosaceous tuberculide have a tendency to rosacea, and they may have the secondary staphylococcal lesions of the latter intermingled with the tuberculide papules, so that treatment of the rosacea along the lines indicated may be necessary. But this will have little or no effect on the tuberculide lesions. For these, apart from the general treatment of tuberculous conditions, injections of gold compounds have in my hands given most satisfactory results.

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2. *Brit. Journ. Derm. and Syph.*, 1938, l, pp. 59-66.
3. *Lancet*, Aug. 24th, 1929, p. 363.
4. *Lancet*, 1934, ii, 11.

Sector News

Guy's Letter

NO longer does Thos. Guy greet us as we cross the Front Quadrangle. He is covered up with sandbags and surmounted by an aspidistra. This mixture of the grave and gay masks all our war-time changes.

The Notice Board in the Colonnade announces post-mortems and Dr. Hill's latest productions. Of the Surgical Wards, some are quiet, empty, and rather broken up (s-s-h !). Others ring with the musical efforts of the billeted Works Department. The welcome green of the Park, once our pride but now sadly injured by our trenches, is returning to its pristine beauty. Miss Addiscot and her girls in green have been busy planting flowers to hide these rude reminders of future horrors.

In the Medical School stern notices forbid admission to rooms where Prof. —— conducts experiments on —— ——. Other notices direct us to the Physiological Theatre, where, under the able leadership of Dr. Hills, local (and distant) talent is co-ordinated for our entertainment on Saturday evenings. In Nuffield House we " reckon drains " on the many efforts of the E.M.S. to jeopardise our livelihood. We are still light-hearted enough to discuss the true significance of " having been."

The Medical Wards are working overtime. In Eyes we are ready to resuscitate dying males, but in the interim Sister Harrison and her staff resuscitate hard-worked House Officers and students with cups of coffee. Victoria awaits female casualties, but in the far division are hidden several " special " patients. Wilks and Addison are Medical Wards with an occasional extension bed to remind us there is a war on. Dozens of N.A.'s (Nursing Auxiliaries) flock round the few remaining representatives of the nursing staff, eager to learn and to help. Members of the C.N.R. (Civil Nursing Reserve) add their varied and sometimes differing experience. The age of chivalry has returned. Ward clerks are seen early in the wards, taking temperatures, making beds, and climbing in the store cupboards. Mary and Miriam are surgical wards, mostly filled with acute cases and a few herniotomies. We have our brighter days. A patient with a double extension and a plastered arm recently went manic, scattering a jar of blood, pulling down his curtains, and crying out, " Fetch me another doctor ; sent me to Bart.'s ! "

For the future we are preparing for a somewhat subdued round of Christmas festivities—subdued because we cannot help thinking what will happen when the bombs begin to fall and we are found somewhat unready, having disrupted our A.R.P. and having tried to get " back to normal."

Below is a review of Tom Hill's latest success, " The Ghost Train."

H. F. L.

THE GHOST TRAIN

From the moment the curtain rose upon a darkened station waiting-room until the final apprehension of the gun-runners the atmosphere of eerie, brooding suspense and imminent deadly danger was well maintained. Excellent use was made of the effects, and the illusion of a train passing at full speed through the station was most satisfying. The scenery added to the realistic effect.

The cast rose nobly to their task and are to be congratulated on a most creditable achievement. Jerry O'Gorman did well as the cheerful idiot, playing the part with gusto. Eric Budd, with his rich Cornish accent, made a patriarchal station-master. Hedley Atkins was well cast as Richard Winthrop, the masterful business man accustomed to take charge of any situation ; while his wife (Nuala Barrie) was realistically rebellious and submissive in turn. They were an effective foil to the honeymoon pair (Roger West and Honor Campbell). Joan Scott had the rare faculty of being old gracefully ; her elderly spinster was charming, and even when tipsy was gentility itself. Herbert Price (John Gordon) and Dr. John Sterling (Mike Hutton) were but indifferent desperadoes, not very terrifying to the common man. Their make-up could have been improved. Price's sister Julia (Marion Priveen) was tense and neurotic and made us sense strange things outside the waiting-room.

The intervals were enlivened by the appearance of Michael Hudson-Evans as refreshment seller and by the wailing of mournful music intended to curdle the blood in readiness for the succeeding act.

A. G. C. C.

Pembury Letter

IN our last letter we had occasion to remark that disunity of purpose was as noticeable in the medical profession as it is in the Ministry. That was indeed true. In the last week we have received a letter from the Ministry giving us the option of part-time service, coupled with a request to give a decision within seven days. Since its arrival every member of the E.M.S. has worn a

worried look and quite obviously cannot make up their minds. Why is this? Surely it should be simple enough. Here is the answer, and we crave your pardon if we tabulate.

1. There have been too many sinister implications about committees doing their utmost to persuade members of the E.M.S. to accept the new scheme. Are we to understand that if we "insist" on full-time service that a black mark will be put against us in Whitehall?

2. What is to happen to full-time members at the end of their year's contract? Are they then to be forced into part time (if so, it would be preferable to take the option now), are they to be able to continue on full time, or are they to be "kicked in the pants" altogether?

3. What of the struggling young consultant who, prior to the war, had but the nucleus of a practice, which in war-time could never make up the loss of salary involved by part-time service? He says: "Shall I keep the extra £300 which I shall get this year, and possibly, though improbably, for the rest of the war, or, if I do this, shall I find at the end of hostilities that I am now the *not* so young consultant, no longer struggling, but just floundering; with no practice, and abandoned by all?"

4. We understand that there is to be a reorganisation of personnel *after* we have made our decision. We can but imagine with horror finding ourselves a "part-timer" in the country, with no hope of a private case, or a "full-timer" in London with private practice barred from us.

5. Are the decisions made this week irrevocable, or will one subsequently be able to make a change, provided, of course, that circumstances permit?

These, then, are some of the reasons for our sad and indeterminate countenances. We believe the new terms were negotiated by and for people with established practices, and God help those other poor devils who make the wrong decision!

We have heard an ugly rumour that Pembury may be closed as an E.M.S. hospital in the near future. We sincerely hope this is not true. In case it is, may we make a plea to reconsider the decision. In the first place, Pembury is the *only* hospital in the sector with proper facilities for teaching pædiatrics. Secondly, it is an ideal hospital entirely devoid of domestic strife, and thirdly, we have adequate clinical material for teaching certain subjects, and with slight help could manage some others. We agree that certain modifications are required, but to shut our hospital will cause dismay to every member of our staff. We believe that if the Army Council followed the same reasoning they would withdraw every man from the Maginot Line, because it is much further for distinguished visitors to get there than if the troops were stationed in the suburbs of Paris, and they have done much less work in the past three months than we have!

But let us leave these gloomy topics, and listen to the voice of a high nursing dignitary at Pembury. "Oh, Dr. ——, far too many of your Guy's nurses are attending our ante-natal centre!"

N. M. J.

Orpington Letter

MANY slow steps in our progress at Orpington have been recorded in the pages of the *Gazette*. Though there is still much room for improvement, we are now a hospital of sorts, and before we forget the early days when there was nothing, the Medical Superintendent would like to record his gratitude to some of those who have been concerned in the early stages.

First to Dr. Scott. Everyone at Guy's knows him as a good anæsthetist and raconteur, but his cheerfulness and his willingness to take on any job, however much outside his usual activities, have been a great standby. Kilpatrick joined us from Darenth Park at an early stage, and the collection and sorting of all our surgical equipment and the choice of what was still essential owes a great deal to him. Doherty joined us later and, never having seen the worst, still sometimes forgets the stage at which we began; but he has been an ideal man for making a real start with surgical work and teaching in the wards, and we are disappointed that he has felt it right to accept part-time service instead of giving us his whole time at Orpington. These three have formed the aristocratic side of the hospital living in luxury at the Temperance Hotel, while the more plebeian medical superintendent and house officers have been content with billets and lunch in the Nurses' Home. McNair and Boland and Batchelor have all helped us, but have not taken the plunge of regular residence at Orpington.

However long the hospital goes on, the four first house officers will always have played a most important part—Reeve, Epps, Carter and Bell. They may think they have not had much interesting medical work, but it is often more difficult to do a little work well than a lot, and they have all helped to establish the best traditions of Guy's house officers in new surroundings. Reeve is still with us for a time, but the other three have departed to new fields just as we felt they were becoming most useful; no doubt in due course we shall be nearly as sorry to lose their successors.

Sister Marriott has already received due acknow-

ledgement for her social activities, but she has done much else behind the scenes, even though there may be less to show for it immediately. It would not be fair to thank her without including Sister Evans for her work in the still more difficult early stages. Sister Evans has now moved with the Massage School to a house nearby, but we still fortunately see and hear plenty of their activities. In everything they have been admirably backed by the seven Guy's Sisters who were here from the start. Like the other units in the Sector, we have received much help and encouragement from the Group Officer and Hampson, who for many weeks worked in close confinement in a small room with innumerable telephones and typewriters.

It is easy to think that all the difficulties have been for those settling down in new surroundings, but there are difficulties also for those who were here before. We all feel grateful to Mr. Dowers, the Lay Superintendent, who has done so much to collect the things we wanted from his fast diminishing reserves and to get what he can for us without offending too deeply against the K.C.C. regulations. In the same way we should like to thank Matron Cross, who has fitted so many more nurses into the home and fed them so well.

Finally, those who have had to do with the administration will never forget the help of Mr. Atkins, the Engineering Inspector of the Ministry of Health; if only he could have been given autocratic powers, all the changes wanted would have followed in days instead of months. Mr. Barker, the K.C.C. Building Inspector on the spot, has also given us much help. When turned out of his office, he accepted it with such good grace that he seemed to have an unusually kindly disposition, but since seeing him in his new office we have realised that there may have been other reasons as well.

If we can continue our progress at the same rate, we hope that in a few months more we may become a good general hospital.

J. M. H. C.

Dartford Letter

ORCHARD HOSPITAL

DOWN in the Orchard something stirred. It was the sound of the new radiators. Not that they have as yet done anything to rival their clamorous predecessors. On the contrary, their behaviour thus far has been commendably modest, and they have even succeeded in supplying a certain fœtid warmth.

It was none too soon. A few days before their arrival there came to the Orchard a new doctor. A young doctor he was, qualified but a few weeks, and fit to trust with ideals of every kind. It was very cold. In the wards he was all right, but throughout his first Sunday he remained huddled against the only radiator that still retained a spark of warmth, not unlike a sheep sheltering under a hedge on a wind-swept hillside. One could see that a certain demoralisation was on its way. All that is now happily ended.

Moreover, in the matter of taking of histories things have improved. The Medical Officers have developed the technique of approaching every case by inquiring whether the patient has ever heard of Hitler. With those that have not it has been found as well to avoid the finer points. By this simple measure much time and labour is saved.

There is, however, a somewhat disturbing change occurring. Whereas but a week or two back nurses were as thick as starlings on a telegraph wire, one can now walk for hours through wards packed with patients and see never a uniform, nor hear so much as the cheep of probationers in the testing cupboard. Mild astonishment at this exodus was expressed by those previously unconnected with the L.C.C. However, it was explained that the cause lay simply in the arrival of fresh convoys of derelicts from the provinces, which was no more than an expression of the Ministry's principle of supplying the greatest number of patients with the fewest number of nurses, a system calculated to produce the largest spate of economical resignations. After that, of course, nobody worried any more.

I.S.

Farnborough Letter

THIS fortnight your humble correspondent has ample news to fill his column, and were it not for the presence of the libel laws and the activity of our ever-watchful Censor, the space required in the *Gazette* would be multiplied one hundred-fold. And so to our muttons.

The new residents, Messrs. Bradley, Eve and Willcox, have now arrived, and are nobly carrying on the traditions of their predecessors by escaping from the hospital as often as possible in search of Big Game. Mr. Silver also has honoured us with his presence, though only for ten days, before taking up a more congenial post in what may euphemistically be termed the Public Health Service. We confidently expect as a result a boom in Messrs. May and Baker's shares. Mr. Leeming has changed from an overworked H.P. to H.S.; his taste for work appears to be completely satisfied by four beds, although his time is as fully occupied as ever.

We greatly mourn the departure of Messrs. Price, MacLean, Stott and Stafford Clark, who finished their appointments in the blaze of festivities set out below. On the last day of the month " Farnborough Follies No. 3 " was produced; so excellent was the local talent on this occasion that we can feel justifiably nettled on hearing only of the brilliance of the Starlings. We shall have great difficulty in repeating such a performance without the help of Messrs. MacLean and Stafford Clark. These two were literally half the show. Proceedings opened with a most impressive Beauty Chorus of Farnborough nurses. They even impressed Dr. de Navasquez, whose prowess in the Talent Spotting Contest was universally admired. A sketch written by no less a person than our versatile Matron followed. The Steward's Office then produced a worthy successor to the porter's burlesque of the previous show, and gave the Residents a chance to see themselves as others see them. The burden of the second half was largely borne by the Guy's contingent. Especially must be mentioned the performance of Mr. Price as the anxious father, and Dr. de Navasquez as the obstetrician. Maurice Chevalier again successfully impersonated Mr. Stafford Clark, and the students, besides much help in other ways, sang amusing parodies.

Our rugger team is nobly carrying on its series of successes, and last week beat the 42nd Tank Corps. Last to mention, but not least, the academic side has received considerable impetus from the visits of the entire Children's Firm, and also during the past week an attempt has been made to revive yet another Guy's tradition in the form of a meeting of the Physical Society.

W. W. G.

Dental Letter

" WALLS have ears ! " the posters warn us. But little thought do we give this sinister statement until its truth is one day brought rudely home to us.

It is one of the " overflow days " at the Tunbridge Wells Clinic, for, strange as it may seem, we do have days now and then when our accommodation is taxed to its utmost. For lack of space we are established with our patient in the " locals' room," a narrow, lofty apartment containing two chairs, next door to the gas-room. We have embarked on one of our more delicate operations when the peace is shattered by a loud Voice close to our right ear. " Well, gentlemen," it booms, " this lady has been very unfortunate, very unfortunate indeed ! Not only has she lost her . . ." We strain our ears to catch the retreating words, but in vain. Our patient blushes prettily. We affect innocence and bend again to our task. Presently we request our victim to rinse her mouth, and instantly a stentorian cry rings out at our elbow. " That's enough ! " it cries. " Now give him some air ! " The patient, her cheeks distended with mouthwash, looks round at us with questioning eyes, completely at a loss how to obey this curt command. But our eyes are fixed on a ragged hole in the wall nearby, into which disappears a fair-sized sample of the local plumbing. And at last our clumsy brain grasps the truth.

For some time now we have eagerly awaited the advent of our black-out curtains at the Clinic. Although we cannot work after 3.30 in the afternoons either by daylight or by the faint glow from the electric lights swinging high above our heads, yet it seemed the thing to have some curtains to draw on the rain-lashed scene outside. So one day, after only a month had elapsed since our arrival, we found one of those little twisty rails looking smugly down on us from above each window. We had to wait only another week before the advent was announced of the curtains themselves. This was received with some satisfaction, and a small crowd gathered to watch their installation. But a gasp of disappointment broke from every upturned mouth as the black cloth was seen to dangle dismally eighteen inches short of its destination. At the time of writing we are still waiting for our curtains.

We have twice succumbed to the soporific atmosphere of the Lecture Room at Sherwood Park, our snores being fortunately drowned by the strains of music which percolate through one wall and by the clatter of ping-pong balls audible through the other.

Outside the Clinic a lean-to bicycle shed has been erected, satisfying a long-felt want. As a museum for the study of the evolution of the bicycle we think it must be unique.

We have our hands and chairs full with children during the first half of each week, but the attendances tail off towards Friday and are practically non-existent on Saturday. We are almost beginning to enjoy ourselves, but we hesitate to become too fond of our life down here in case some of us are transferred to London in the New Year. It seems unkind to hope that we shall go.

" ODONTOME."

Massage Letter

AFTER many rumours of removal and general ups and downs, which have nearly driven Sister, the staff and the students insane, the Massage Department has finally come to rest in a magnificent house and garden, complete

with lily pond. In spite of the fact that the kitchen is the Common Room, and the garage the Gym., everyone is settling down quite happily to work again. At present patients are rather a long way away at Orpington and Farnborough hospitals, but complexions are getting quite rosy with the daily cycle run. We are hoping, with the co-operation of the local medical practitioners, to start a small Out-Patients' Department at " Everden " in the near future.

At the moment odd snatches of song can be heard reverberating through " Everden," figures can be seen flitting to and fro practising ballet steps, and Sister alternates between lectures and her typewriter with an armful of M.SS., murmuring : " Rehearsal, 4 p.m. ; must have Act II typed." The Massage Department will return to normal after the production in the near future of our Christmas Pantomime, and we hope our audience will enjoy it as much as we do !

J. M. H.

Nursing News

GUY'S FINAL EXAMINATION

GUY'S Final Examination, the first under war-time conditions, was held at Orpington on November 21st and 22nd. Miss Cross was kind enough to allot to us half a ward. After various journeys to Guy's and other outposts of Farnborough and Orpington a goodly selection of equipment was gathered together and the half-ward began to resemble the Revelstoke Department. By November 20th it really began to look like home, and we waited with baited breath for Sister Florence to pass judgment. Alas, much was still left to be desired. No matches on the Urine Testing Trolley, no cap-pin on the Poultice Table. At last it was as complete as we could make it, and the day arrived.

The Examiners for the *Viva Voce* were Sister Hilda and Sister Fish, and for the Practical Examination Sister May and Sister Florence.

Had it not been so early in the morning when Sister Hilda arrived with the nurses from Pembury who were taking the examination, I feel sure Orpington would have staged a welcome for her—we were all so pleased to see her again. Her very presence gives us courage. There she was once again, ready to help us with our difficulties—her unbiassed opinion and advice more valuable than ever. May we take this opportunity of thanking her for coming.

Sister May, alas, was with us for the last time. We reluctantly bade her farewell and wished her luck in her new post as Matron of the Central London Hospital, Gray's Inn Road. We shall miss her very much—in fact, we cannot imagine Guy's without her.

To see so much equipment gathered together dazzled us, and the sight of a Guy's crest on a triangular dish brought tears and one would sell one's soul for some of that tubing, so base have we become. We are hoping the next examination may be held here so that once again we may feast our eyes and meet our friends.

N. S.

The presence of Sister Hilda at Orpington for Guy's Final Examination was the occasion of a Reunion of Guy's Staff and Sisters from two of the Base Hospitals, Farnborough and Orpington.

The evening started well with sherry. The ice was broken, and all the gossip of Guy's was threshed and re-threshed again.

Entertainment was provided by Miss Sybil Evans, who delighted us once again with her music and charming German songs. Mr. Cann was prevailed upon to sing, and Professor Johnson surprised everybody with a hidden talent—singing jocular songs to his own accompaniment ; he has certainly been hiding his light under a bushel. The crowning event of the evening was a quartette by Mr. Doherty, Dr. Campbell, Miss MacManus and Miss Cross, Matron of Orpington Hospital. They sang " The Londonderry Air " to enthusiastic applause.

The Grand Finale was " Auld Lang Syne," and thus ended a very successful evening which we hope will be repeated in the near future.

M. E. F.

The Dental School in Temporary Quarters

AMONG the many changes brought about by the war is the movement of the Dental School to Tunbridge Wells.

The School is divided into two portions, the main part being at Sherwood Park, a large country mansion which is half-way between Tunbridge Wells and Pembury, and a clinic in the town. At Sherwood Park are installed the prosthetic laboratories for the first- and second-year students, the Phantom Head Room with accommodation for thirty students commencing their third year of study and the Dental Histology and Research Laboratory, where students have every facility for studying histology and patho-histology. There is also a spacious lecture room where all the routine courses of lectures are given, in addition to a large

reading-room. Sherwood Park is also the students' hostel, where arrangements have been made to accommodate a considerable number of students. There are sixty students in their clinical period, 140 doing their prosthetic and Phantom Head work. Sixty-eight students are living in the hostel.

It was naturally a big undertaking to arrange for all the necessary accommodation, and at first one or two finishing touches may have been lacking, but as each week passes these difficulties are being overcome. Considerable improvements have been made, including a substantial reduction in the charge for board and lodging.

Attention has been given to the question of amusements. Table tennis and darts have been provided, and seem very popular, there being other games provided for those of different tastes. Gramophone recitals have proved to be successful evening entertainments, a dance was held one evening, and, in view of its success, a second one is being organised.

Professor Herbert is the Warden, and assumes responsibility of everything running smoothly, and brushing all difficulties aside. Judging from the happy atmosphere, and the general feeling of ease it can be truly said that we have to be grateful to him for such splendid results.

The Anatomy Department is housed in the basement of the mansion. In addition there is an Annexe in the grounds which provides accommodation for a number of students and some of the staff. The mansion and annexe are situated in very spacious grounds, which make very agreeable surroundings.

The Clinic is situated in Tunbridge Wells itself, and occupies the top floor of the school buildings of a Baptist Chapel. This, at first sight, may sound rather incongruous, but in reality provides excellent conditions, and we are fortunate in having been able to obtain such excellent premises. There is a main Conservation Room, with plenty of daylight, which contains twenty-four chairs, a separate room for extractions, another room used for clinics, and as an overflow room, and another room for the Director, where he gives special demonstrations.

As one might imagine, the greatest difficulty starting in a new town has been obtaining sufficient clinical cases. This difficulty is being gradually overcome, which the rising weekly attendances show, there being 120 attendances the first week, rising to 138, 168, 220 and 232 on successive weeks.

The main source of our patients has been from the evacuated school children from London, Czech refugees and soldiers with a sprinkling of patients from the town.

The whole move has, of course, been a very big upheaval, but nowadays it is a question of adaptability to new changing circumstances, and the Dental School authorities have given a lead which is being supported by the co-operation of all.

G. S. L.

Correspondence

The Orchard Hospital Radiators

To the Editor of the GAZETTE

SIR,—No more stirring example of the power of the Press could be imagined than the result of your publication of my letter, last fortnight, about the Orchard radiators. Engineers were on the spot within three hours of the arrival of *Gazette* copies in Dartford.

Yours, etc.,

I. STEWART.

Orchard Hospital,
Dartford.

"Conceited, Idle and Incompetent"

To the Editor of the GAZETTE

SIR,—I cannot let pass Mr. Thompson's statement in your recent issue that the last war bred house officers who were "conceited, idle and incompetent."

"Conceited"—I allow others to judge. But "idle"—no, certainly not. The only reason I can suggest for this accusation is that Mr. Thompson did not have an H.S. specially allocated to himself in those days, when the shortage of Residents was so acute, but had to make shift with whoever could spare time—among his other many duties—to attend upon him. I myself was called upon to give many anæsthetics for Mr. Thompson, although at that time I happened to be the one and only "R.O.," and Residents in those days had to do their turn of A.H.S. duties in the Surgery during take-in, and also had to be responsible for the gases in the Dental Department, no matter what particular appointment they held. There was no time for idleness in those days, even if one had wished for it.

Lastly—"incompetent." According to the testimonials I received from members of the visiting staff—which I treasure to this day—I was

not considered in any way incompetent by those to whom I had the good fortune to be officially attached.

I much regret that Mr. Thompson should have made such a sweeping and disparaging statement without real foundation, as there are many others besides myself whom I feel sure will also feel resentful.

Yours, etc.,
"RESIDENT, 1916-17."

Canterbury,
Kent.

Sport and Hospital Information, etc.

Rugby

FIXTURES, FIRST XV

THE undermentioned fixtures have been arranged in addition to the lists previously published in the *Gazette*. It is hoped that as many supporters as possible will turn up at Honor Oak Park on December 30th to welcome Northampton.

		Opponents	*Ground*
1939			
Sat., Dec.	30	Northampton	H.O.P.
1940			
Sat., Jan.	6	St. Thomas's Hospital	H.O.P.
,, ,,	13	Metropolitan Police	H.O.P.
,, ,,	20	St. Mary's Hospital	H.O.P.
,, ,,	27	Harlequins	H.O.P.
,, Feb.	3	Aldershot Command	H.O.P.
,, ,,	10	Oxford University XV	Oxford
,, ,,	17	Rosslyn Park	Old Deer Park
,, ,,	24	University College Hosp.	H.O.P.
,, Mar.	2	London Hospital	H.O.P.
,, ,,	9	London Irish and Welsh	H.O.P.
,, ,,	16	—	
,, ,,	23	Gloucester	Gloucester

Pass List

UNIVERSITY OF LONDON.
THIRD (M.B., B.S.) EXAMINATION.
November, 1939.
PASS.

Old Regulations.

J. R. Audy
J. A. Bowen-Jones
A. R. Bradley
D. M. F. Carter
A. J. Drew
W. Fine
H. R. W. Franklin
J. B. Franklin
F. N. Glover
A. C. Greene
W. E. Greenwood
W. R. L. Harrison
C. F. Hawkins
B. Levin
A. E. Loden
H. E. Moody
D. A. Osborn
T. M. L. Price
H. D. Smith

Revised Regulations.

J. M. French
D. C. Lewin, B.Sc.
H. F. Lunn, B.Sc.

GROUP I.

Under Old Regulations.

P. W. Clarkson
A. H. Mayne

PART I.

Under Revised Regulations.

T. A. H. Adkins
E. R. Davies
S. W. Hinds
J. C. Houston
R. Moore
K. O. Rawlings
H. A. Rowley
A. F. Rushforth
L. G. Scott
M. A. Shellim
J. A. E. Watts

PART II.

Under Revised Regulations.

G. F. Smart
H. Wormald

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
November, 1939.

Surgery.

A. M. McCall.

Medicine.

R. M. J. Franks
J. N. Hunt
*J. A. Sutton

Forensic Medicine.

R. M. J. Franks
J. N. Hunt
*J. A. Sutton

Midwifery.

J. P. Rochford.

* Has completed the examination.

Papers by Guy's Men

Kark, Robert, and Another. Nutritional deficiency of Vitamin K in man. *Lancet*, 1939, ii, 1162.

Macintosh, R. R., and Another. Anæsthesia in wartime. *Brit. Med. J.*, 1939, ii, 1077.

Fry, W. Kelsey. The barrel bandage for fractures of the jaw. *Brit. Med. J.*, 1939, ii, 1086.

Maizels, Montague. Preservation of stored blood. *Lancet*, 1939, ii, 1219.

Ryle, John A. Anorexia nervosa. *Clin. J.*, 1939, lxviii, 465.

McGregor, H. G. The psychological factor in rheumatic disease. *Practitioner*, 1939, cxliii, 627.

Birth

SYMMONS.—On November 12th, 1939, at 2, Strathmore Gardens, Kensington, W.8, to Jeanne (née Edmands), wife of Surgeon Lt.-Cmdr. (D.) R. Symmons, R.N.V.R.—a son.

Deaths

KNOX-SHAW.—On November 23rd, 1939, Chas. Thos. Knox-Shaw, of Oxford, aged 84.

TODD.—On active service, Thomas Francis Todd, M.S., F.R.C.S., dearly loved eldest son of Frederick Ernest Todd and Margaret Mary Todd, of 32, Crescent, Davenport, Stockport.

EDS. { E.B.R.
H.F.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIII — *30th December 1939* — *Number 1342*

PASSIM

THERE are disadvantages as well as advantages of the written word. The advantages are many and plain. For instance, we can send you our Christmas Greetings (we hope you all had a very excellent Christmas), and wish you all a healthy and happy New Year, in which may war in Europe cease. There is great literature for you to read—Shakespeare's plays, "Mein Kampf," Gray's "Anatomy," and lesser literature for us to read. For example, we would not have liked to have missed "The Jury returned a verdict, in accordance with the medical evidence, that death was due to shock from exposure. They added: 'It is very unsatisfactory that a naked woman should have been wandering on the beach in the middle of the night.'"* And there is Bureaucracy, which is government by forms to be filled in. But, on second thoughts, we will transfer Bureaucracy to the disadvantages of the written word.

And now for these disadvantages. We have two particular bees in our bonnet. The first is that there is much too much written. About medicine alone there is such a jungle of books and papers printed that one hundred American professors of medicine working one hundred hours a fortnight with one hundred secretaries apiece could not abstract the good from the bad in one hundred years. (Please do not write to us to say that one hundred should be one hundred and fifty, or one hundred and x, or x° years—we entirely agree with you.) And our second bee is Bureaucracy—fine flower of English local government and the E.M.S. The complicated and ever-expanding organisation of Bureaucracy can only exist by the written word and its chief counter is the *Form that must be Filled In.*

To illustrate our point come with us to a bureaucratic air-raid. Imagine that a County Council-*cum*-E.M.S. hospital has been presented with one air-raid casualty, a man who has inhaled a spent bullet. Swiftly our casualty is brought to hospital by the voluntary ambulance driver—but, alas, she has erred. She should have taken him first to a First Aid Post. She fills up a form to say she has erred. At the First Aid Post she fills up a form to say that she has delivered a casualty, the First Aid Post fills up many forms to say they recommend the casualty for hospital treatment, the ambulance driver makes out a form to say she knew this all the time, but on reflection tears it up, and back she brings the patient to our hospital. (This takes 30 grams of paper, 5 c.c. of ink, and 0.5 hour time. The patient has now some stertor.) We can only suggest to you the number of forms to be filled in when the casualty enters our hospital —there are so many. To admit the patient, to admit the patient's clothes, to give him morphia, to obtain an oxygen cylinder, to prevent a nursing auxiliary attempting to remove the bullet with a hair-pin, to send for an oxygen tent—all these require more forms and more ink (approximately 60 grams paper, 6 c.c. ink, and 0.75 hour time). Having got the patient into bed to order his X-ray, diet, medicines, ice to head, hot-water bottle to feet, and to complain that there is no oxygen in the oxygen cylinders for the oxygen tent requires more forms, ink and time. (By now the patient has stridor and is an attractive lilac colour.)

With great prescience the M.O. demands a

*From the *Daily Telegraph* quoted in "This England."

bronchoscope. The hospital does not possess a bronchoscope. He rings up the Ministry of Health. He talks to forty-two separate departments of the Ministry of Health and demands urgently a bronchoscope. At last he is told to let them have his demand on the appropriate form signed by the appropriate authority. (The patient is now Prussian blue.) Despairingly the M.O. rings up the County Council. After an hour and a half he is put through to forty-four different departments. To each he cries, "Urgent—a bronchoscope." "Fill up the requisite form in triplicate and get it countersigned by the appropriate authority"—comes back the answer. He suddenly thinks of Guy's and the Group Headquarters. Alas, too late. The patient is dead. Saddened he fills up a relatives', a chaplain's, an undertaker's, a hearse, a shroud, a coffin form, a death certificate, a mortuary and a P.M. form. With his last drops of ink he applies for leave from this form-filled nightmare. Altogether he has used 0.5 kilogram paper, 25 c.c. ink and 6.0 hours of time in attempting to treat this patient.

(On reading this through we think there must have been a lot of brandy on our Christmas Pudding—or something.)

CHANGES occur so thick and fast in the E.M.S. that we have difficulty in keeping up with them. Many of the Guy's consultant staff have accepted part-time service in the E.M.S. Very shortly, two floors of Nuffield House are to be reopened to "private" patients. The displaced house-officers leave their Dunlopillo mattresses to return to the college. Those consultants who have accepted part-time work in the E.M.S. are to share a diminished number of beds (compared with the peace-time complement) in the hospital. They will also have beds at the sector hospitals to which they are attached, in which they can put patients. After January 1st the Government will provide no more billeting money for billeted medical students. Guy's is thus gradually throwing off its ill disguise of Casualty Clearing Station and returning to its earlier status of Civilian Hospital.

WE regret that from some of the sector outposts we have received no news and no Christmas Letters. Can it be that over this festive season there has been no news, or did the censor hold back these letters for his perusal? Anyhow, we look forward to hearing from all the Sector hospitals in time for our next issue. We hope to publish photographs, extracts and reviews of two Sector shows in our next number: "Joyous Green," produced at Dartford and "Dick Orpington," produced at Orpington.

Vitamin Deficiency in Childhood

A Clinical Lecture delivered at Guy's Hospital by Richard W. B. Ellis, Esq., M.D., F.R.C.P.

GENTLEMEN,—At no period of life are the accessory food factors, or vitamins, of such great clinical importance as in infancy and early childhood. The popularity of artificial feeding during infancy, the widespread use of preserved foods, and the way of life engendered by modern economic and industrial conditions, make it necessary to recognise and provide for the vitamin requirements of the child, who has little choice in the matter of the food he is given and still less in the surroundings in which he lives. During the past twenty years, a vast amount of experimental work has been carried out on the chemical and physical properties of the vitamins. Vitamin D and Vitamin C have been prepared in crystalline form (calciferol and ascorbic acid), the precursor of Vitamin A has been recognised (carotin), and the Vitamin B complex has been subdivided into a number of component factors of which the full tale is not yet told. Much of this experimental work has had its immediate clinical application. Cases of florid "Glissonian" rickets, at one time known as "the English Disease," are becoming rare even in the smoke-laden atmosphere of London; infantile tetany and scurvy are comparatively seldom seen; whilst xerophthalmia, except in the distressed areas, is completely outside the experience of most practitioners.

In spite of this, however, minor degrees of vitamin deficiency of all types are undoubtedly far commoner than is generally realised, and account for the failure to thrive of many infants in whom they could readily be corrected. Their

existence can now be confirmed by tests not previously available, *e.g.*, estimation of ascorbic acid excretion in the urine (Vitamin C), examination of urine and mucosal scrapings for keratinised epithelium (Vitamin A), and estimations of plasma phosphorus and phosphatase, and radiological examination, in the case of Vitamin D.

Vitamin deficiency may occur in two ways. Either the diet may be deficient in vitamin content, or faulty assimilation may render a diet which would be sufficient for a normal child inadequate for a sick one. In the first case, it should be remembered that although added Vitamin C or D has been prescribed, it may be reaching the child in amounts insufficient to protect. Thus, batches of oranges with a negligible Vitamin C content sometimes find their way on to the market, and the Vitamin C content of all orange juice is rapidly reduced by standing at room temperature or by adding hot water in the presence of oxygen. Similarly, the cod-liver-oil and vitamin content of any proprietary brand of emulsion should be known before it is prescribed. Defective assimilation is a less common cause of vitamin deficiency, but may be seen for instance in coeliac disease.

The following table indicates the more important characters and sources of the vitamins, deficiency of which is associated with recognised clinical disease in childhood :—

Vitamin.	*Solubility.*	*Resistance to Heat, Aeration, etc.*	*Deficiency.*	*Sources.*
A $C_{20}H_{29}OH$.	Fat soluble.	Resistant to 120° C. and alkaline saponification, but destroyed by aeration at all temperatures ; also by exposure of fish oils to light.	Keratomalacia. Xerophthalmia. Night-blindness. ? Defective growth. ? Infection.	Halibut and cod liver oil, sheep and ox liver, carotin-containing vegetables.
B1 $C_{12}H_{17}N_4OS : 2HCl$. (Anti-neuritic.)	Water soluble. (Adsorbed by Fuller's earth.)	Moderately thermostable (resisting 100° C. for 1 to 2 hours) ; destroyed by prolonged heating and by alkalis.	Beri-beri.	Yeast, marmite, wheat and rice germ, egg yolk, liver, roe, peas and beans.
B2 $C_{17}H_{20}N_4O_6$. (Anti-dermatitic.)	Water soluble.	More thermostable than B1, especially in acid solutions. Destroyed by ultra-violet irradiation.	Pellagra.	Yeast, marmite, liver, kidney, milk, greenleaf vegetables, fresh meat, egg white.
C C_6H_8O. (Anti-scorbutic.) Ascorbic acid.	Water soluble.	Destroyed by aeration and rapidly by heat in presence of oxygen or alkalis.	Scurvy.	Orange, lemon, tomato and grapefruit juice, swedes, spinach, watercress, cabbage.
D $C_{27}H_{41}OH$. (Anti-rachitic.) Calciferol.	Fat soluble.	Thermostable and resistant to aeration. Synthesised by ultra-violet irradiation of ergosterol, but destroyed by prolonged irradiation.	Rickets. Tetany.	Halibut and cod liver oil, irradiated sterol-containing foods (pasture-fed milk and butter, summer eggs, etc. varying greatly in potency).

HYPOVITAMINOSIS A

The complete clinical picture of Vitamin A deficiency is seldom seen in older children except under conditions of semi-starvation. Sub-clinical states, however, recognisable pathologically, are not very uncommon during the first year of life. It has been claimed that Vitamin A has a definite anti-infective property, but it is probable that the hyperkeratinisation of epithelium to which the deficiency gives rise, predisposes to infection, particularly of the respiratory tract. The vitamin is not synthesised in the body, so that Vitamin A or its precursor carotin must be supplied in the diet.

The specific effect of Vitamin A deficiency is on the epithelial structures, and Blackfan and Wolbach have described the primary consequence as " a specific starvation of epithelium resulting in atrophy and finally by replacement with stratified keratinising epithelium, identical in all locations and arising from focal proliferations of basal cells." Hyperkeratinisation of the cornea, which is the most important diagnostic sign, is only recognisable clinically at a relatively late stage. Secondary effects include atrophy of muscles and lymphoid tissue, depletion of fat storage, and anæmia which may be accompanied by widespread evidence of hæmosiderosis, particularly in the liver and spleen. In the bones, atrophy of the epiphyseal cartilage results in cessation of growth. In many fatal cases, the keratinising metaplasia of the mucosa of the respiratory tract has been succeeded by bronchitis or bronchopneumonia, accompanied by bronchiectatic cavities. Pancreatic lesions, which may further interfere with fat metabolism, have been described but cannot be regarded as specific.

The diagnosis is unlikely to be made with confidence in the absence of eye signs, which consist of (1) Bitot's patches, which have been compared to the appearance of frost on window panes, affecting the scleral conjunctivæ, and associated with a dry, lustreless appearance of the conjunctivæ (xerosis conjunctivæ), and (2) xerosis or finally perforation of the cornea. It should be emphasised that these are *late* signs of Hypovitaminosis A. In older children, the presenting symptom is commonly night-blindness. Growth is not invariably delayed. It is of interest that these patients very rarely show evidence of rickets or other vitamin deficiency, pointing to the specific nature of the disease.

BERI-BERI

Infantile beri-beri, though rarely seen in England, is endemic in some parts of the world where the native diet is grossly deficient in Vitamin B1. Symptoms indicative of this deficiency may, however, occur in such conditions as marasmus and coeliac disease, and it is probable that the " famine œdema " seen in Central Europe after the Great War and amongst the civilian population in Spain at the present time are due to the same cause.

The condition is characterised by atony and dilatation of the gut, water retention, peripheral neuritis and cardiac enlargement, particularly of the right side of the heart. Affected infants show anorexia and failure to thrive. There is slowing of intestinal peristalsis, with consequent constipation and abdominal distension which may be of extreme degree. The limbs become painful, and there may be paralysis and inco-ordination. The hands, feet and face are swollen and œdematous. Tachycardia is a constant symptom, and enlargement of the heart to the right is detectable clinically or by radiographic examination.

PELLAGRA

It is now generally considered that this disease is due to a deficiency of Vitamin B2, and not as at one time supposed to a toxic factor present in maize. A number of cases in children have been described in England, whilst it is not very uncommon in the Southern States of North America and Southern Italy. The disease has appeared during war conditions amongst the civil population in Madrid. Kwashiorkor, a disease affecting children in West Africa, is probably infantile pellagra.

The earliest symptoms of pellagra are anorexia, lassitude and diarrhœa. As the condition progresses, the child becomes irritable, the tongue red and glazed, the diarrhœa and dyspeptic symptoms more marked, and the characterictic skin rash begins to appear. This commonly affects the backs of the forearms and hands in a symmetrical " mitten " distribution, and a " butterfly" area on either cheek and across the bridge of the nose. If the legs and feet are exposed to the sun they are likely to be affected also. The rash is at first an orange-red erythema, later becoming deeply pigmented. The skin is peculiarly rough over these areas. In the terminal stages there are profound mental changes. Correction of the diet, with the introduction of fresh meat and vegetables, liver extract and brewer's yeast, is curative. When wasting is severe in the presence of chronic diarrhœa, repeated injections of intravenous glucose should be used.

INFANTILE SCURVY (*Barlow's Disease*)

A hæmorrhagic disease directly due to Vitamin C deficiency, affecting most commonly infants

between six months and two years of age who have been artificially fed. It is not, however, a distinct disease from the scurvy of older children and adults. The hæmorrhage which is characteristic

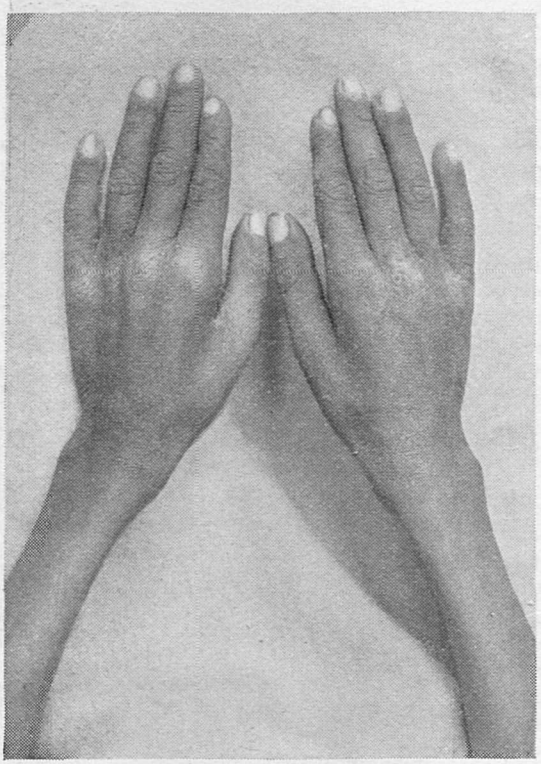


Fig. 1.
Hands of a boy with pellagra seconday to tuberculous enteritis ; note mitten distribution of pigmentation.

of the disease results from increased permeability of the capillary bed. Infants who come to post-mortem show widespread hæmorrhages in the skin, gums, kidneys, etc., but most constantly beneath the stripped-up periosteum of the long bones. In the legs the hæmorrhage may be so extensive as to double the width of the limb ; it may encase the whole of the shaft or be limited to one end. There is also hæmorrhage into the bone marrow, and fracture associated with hæmorrhage is liable to occur through the rarefied metaphysis. At the costochondral junctions the rib is expanded and frequently separated from the cartilage by a line of hæmorrhage, through which backward dislocation of the cartilage may occur. There is some generalised rarefaction of the osseous system, depending on the duration of the disease, and most evident in the " Trummerfeld zone."

Clinical Picture.—Two types of scurvy are recognised, the acute due to sudden and complete deprivation of Vitamin C, and the subacute or chronic, in which hæmorrhagic scurvy is more or less rapidly precipitated in an infant who for months has been receiving minimal amounts of Vitamin C. Hæmorrhage in the latter is likely to be more severe and extensive.

Pain is the most constant presenting symptom, and is generally attributed to subperiosteal hæmorrhage. An infant who has previously been well (acute scurvy) or has failed to thrive for some little while, suddenly begins to cry on being handled, particularly when the legs are touched. Often the baby will scream if the cot is even approached, knowing the agony that any movement will cause. The legs are held in a position of flexion and abduction, and are often swollen. *Hæmorrhage* into the gums, which may give the whole alveolar margin a swollen, purplish-black appearance and cause shedding of the teeth, commonly occurs. Spontaneous bruising, petechiæ, orbital hæmorrhage, causing exophthalmos, or the presence of macroscopic blood in the stools or urine are seen in severe cases. *Fracture* through the epiphyseo-diaphyseal junction, with dislocation of the epiphysis, will increase the pain and swelling of the affected joint. *Anæmia* is not uncommon in those cases in which there has been prolonged Vitamin C deficiency ; Barlow commented on the " pallor of a somewhat dirty sallow tint." The

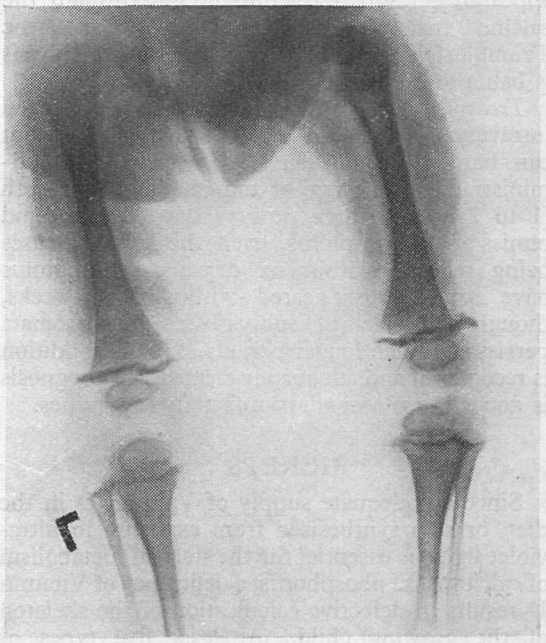


Fig. 2.
Scurvy, showing densely calcified matrix and adjacent Trummerfeld zone of rarefaction.

anæmia is typically normocytic, thus differing from the microcytic anæmia of iron-deficiency, and responds to the administration of Vitamin C. *Œdema*, particularly over the affected limbs, is commonly present, and ascites, or pleural and pericardial effusion, may be recognisable in severe cases. *Temperature* is often slightly, or even considerably, raised, but in many cases the whole course is afebrile.

Radiological Examination.—This has proved of the greatest value in the differential diagnosis of active scurvy, demonstration of healing, and recognition of early and "subclinical" cases. The earliest signs are found most commonly at the ankles and wrists, and consist of a small area of rarefaction at the outer corner of the radius or the anterior corner of the tibia, the cortex in this site being so thin as to be hardly definable and the area of rarefaction having the appearance of a triangular cleft. Later, a dense line of calcification appears at the end of the shaft, often extending laterally beyond the cortex and showing fragmentation; immediately beneath this lies a bend of extreme rarefaction ("Trummerfeld zone"), whilst there is some general rarefaction of the whole of the shaft. As healing takes place, it will be possible to distinguish progressive calcification of the sub-periosteal hæmorrhages. The epiphyses in active scurvy are rarefied and surrounded by a linear outline, giving a ring-like appearance. When fracture occurs through the calcified matrix (or less commonly through the Trummerfeld zone of rarefaction), the epiphysis is liable to be displaced.

Treatment.—Ascorbic acid has been given intravenously in doses of 100 to 400 mgs., but can hardly be considered necessary. The administration of orange or tomato juice by mouth (1 to 2 ounces three times a day) causes rapid remission of symptoms, even the severest cases being relieved within six days. All symptoms have usually disappeared within three weeks, though the calcified subperiosteal hæmatomata persist for much longer periods. If the condition is recognised and adequately treated, the prognosis is good unless secondary infection supervenes.

RICKETS

Since an adequate supply of Vitamin D in the diet, or skin synthesised from exposure to ultra-violet light, is essential for the normal metabolism of calcium and phosphorus, a deficiency of Vitamin D results in defective calcification of the skeleton of the growing child. At least five types of rickets are recognised, though one of these (Renal Rickets) differs in many respects from Vitamin D deficiency rickets. Classifying cases on an age basis, we have *Fœtal or Neonatal Rickets* (an extremely rare condition seen occasionally in the infants of osteomalacic women, and quite distinct

Fig. 3.
Healed scurvy. Calcifying subperiosteal hæmorrhage.

from osteogenesis imperfecta and achondroplasia with which it has been confused); *Infantile Rickets* (the common type, seen most frequently in infants between four months and two years of age); and *Late Rickets* of older children and adolescents. The term " Juvenile Osteomalacia " is sometimes used synonymously with the last. In addition, there are three special types—Renal Rickets, Cœliac Rickets, and a rare condition, Hepatic Rickets, in which severe rickets complicates hepatic cirrhosis or congenital atresia of the bile ducts. Rickets may occur in association with other types of deficiency disease, *e.g.*, scurvy.

Ætiology.—Whilst it is possible for rickets to arise from extreme calcium and phosphorus starvation, the great majority of cases are due to Vitamin D deficiency. As already indicated, Vitamin D can be supplied in the diet or can be synthesised in the skin by irradiation; the rays having this capacity are those at the ultra-violet end of the spectrum, having a wave-length of approximately 280 Angström units. Experimentally, Vitamin D is produced by similar irradiation of ergosterol. Since rickets can be prevented and cured both by irradiation and administration of preformed Vitamin D, it follows that children developing clinical rickets have usually been living on an inadequate diet and have also had inadequate exposure to sunlight. The condition is rare or unknown in sunny climates where children are allowed free exposure to the sun, but becomes relatively common in Northern climates and particularly in industrial reas. Owing to the obliquity with which the sun's rays reach the earth in the Northern hemisphere, the atmosphere filters off a high proportion of the effective ultra-violet rays and the smoke pall over large cities decreases them still further. Negro children, whose pigmentation is designed to protect them from tropical sun, are particularly liable to develop rickets in a Northern climate, since their pigmentation prevents them benefitting from the smaller proportion of anti-rachitic rays reaching their skin. Rickets reaches its highest incidence in March and early April, after the months in which sunshine and outdoor exposure have been minimal. The regular exposure of small areas (*e.g.*, face, hands and legs) appears more effective in preventing rickets than occasional exposure of the whole body, and hence infants should be taken out of doors regularly both in summer and winter. Ordinary window glass filters out practically all effective ultra-violet rays. Even if regularly exposed, infants in Northern climates, particularly city dwellers, should have preformed Vitamin D added to the diet during the first two years of life.

Age and Growth.—Rickets is essentially a disease of active growth, and is most liable to affect infants between four months and two years of age. Premature babies are particularly liable to be affected early and severely. Under rachitogenic conditions, and especially in pigmented children, infantile rickets may persist considerably after the age of two. If rickets occurs for the first time in later childhood, cœliac or renal disease should be suspected as the underlying cause. It is, however, liable to develop in Indian girls on a deficient diet when they enter purdah at puberty. *Infection*.—Whilst rachitic infants have a low resistance to infections of all kinds, it

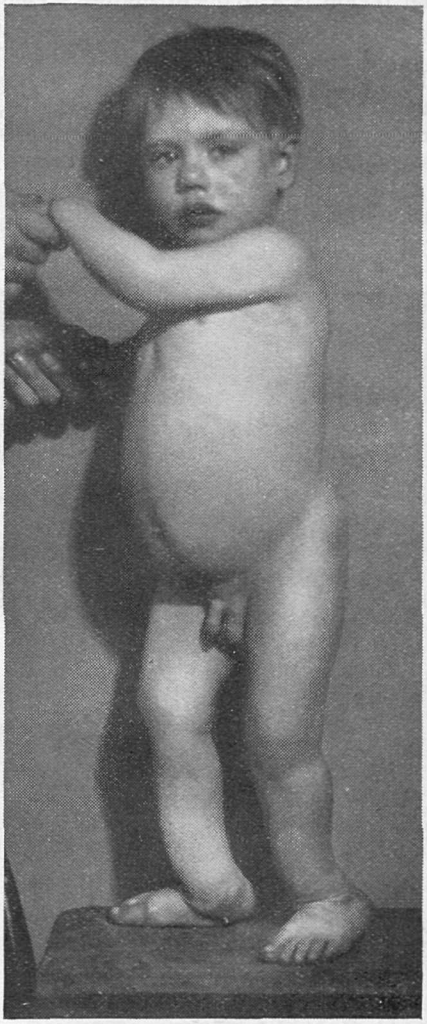


Fig. 4.

Rickets, showing deformity of legs.

is also true that infection will add to the severity of rickets. Congenital syphilis is a good example of this.

Clinical Picture.—The principal effects of rickets fall on the osseous system, but vary somewhat with the age of incidence. The skull shows frontal bossing and delayed closure of the anterior fontanelle. In young infants, craniotabes of the occipital region is a frequent finding. Dentition is delayed, and the teeth may be defectively calcified and carious. Some degree of beading of the costochondral junctions is one of the commonest and earliest signs. Flaring of the lower ribs, with in severe cases the formation of pigeon breast and Harrison's sulcus, is most likely to occur when there have been repeated respiratory infections. Expansion of the epiphyses at the wrist and ankle

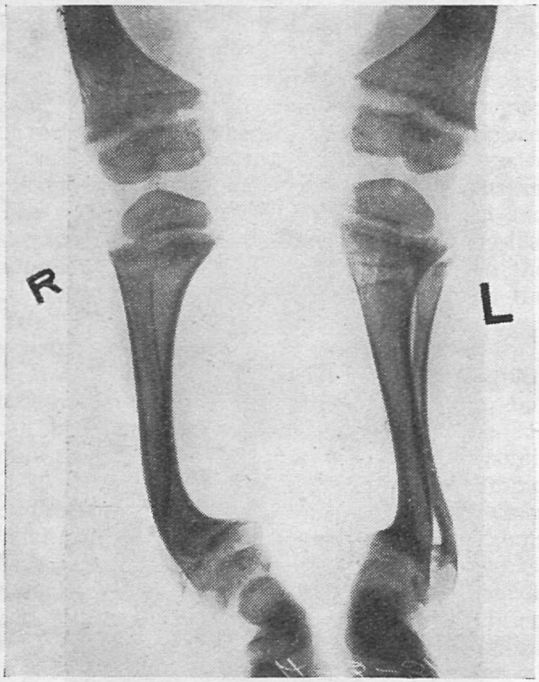


Fig. 5.

Active rickets. Generalised osteoporosis ; bending of tibiæ and fibulæ ; " cupping " and disordered growth line.

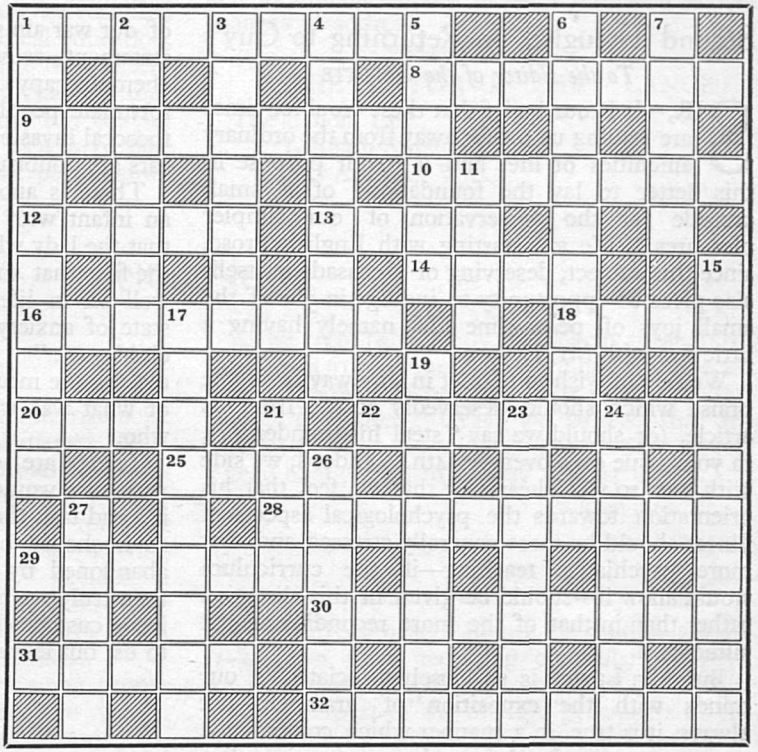
is usually recognisable in florid rickets, and bowing or acute bending of the tibiæ above the ankle in those infants who have begun to walk. Genu valgum or varum is a probable sequela. A similar bowing of the forearms occurs when the infants are sitting and leaning forward on their hands. In addition to the skeletal changes, the muscular system becomes flabby and hypotonic, and this contributes to older infants " going off their legs " with the onset of rickets. Weakness of the lumbar muscles may result in scoliosis or kyphosis. Respiratory infections and recurrent digestive upsets, with the passage of spinachy stools, are so frequent as to rank as symptoms of the disease. The latter give rise to the abdominal distension commonly seen. The liver and spleen may be displaced downward by the costal deformity, or actual splenic enlargement may occur in association with the nutritional anæmia that is a frequent association with active rickets.

Prophylaxis and Treatment.—Owing to the variable ætiological factors, it is impossible to state the exact number of units of Vitamin D which should serve as a minimum protective dosage throughout infancy. Indeed, there is evidence that, for instance, irradiated milk is more effective, unit for unit, than other forms of Vitamin D. Similarly, the regular exposure of small areas of the skin (hands, face and legs) is more effective than occasional exposure of the whole body. Breast-feeding, under urban conditions, is frequently an inadequate protection, as human breast milk may contain only minimal quantities of Vitamin D. As a working rule, infants should be given 3 drachms of 50 per cent. cod liver oil emulsion per day from the age of two months, increasing during the fourth to sixth month to 6 drachms a day. This should be continued at least to the age of two years. Regular administration is clearly most important during the winter months. When fat is not well tolerated, a corresponding dosage of Vitamin D concentrate can be substituted. This applies particularly to premature infants ; with them the administration should be started even earlier. In the treatment of active rickets, a larger dosage (*e.g.*, 15 minims daily of calciferol) should be combined with exposure to ultra-violet light (mercury vapour lamp) and correction of faulty hygienic conditions. Success has recently been claimed for single massive doses of Vitamin D concentrate both in prophylaxis and treatment.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Crossword No. 10

By "Pepsin"



ACROSS

1. Brachycephalic vegetable? (2 words.)
8. Child's exclamation to parent on seeing London? Difficult to see through, perhaps!
9. "Meaning" is hail in a temper.
10. Physicist.
12. Silk thread.
13. Thin and weak.
14. Rare gas none can make.
16. Physician's boast? A handy achievement, anyhow!
18. More animal than vegetable.
20. Their consistency is sex-determined.
22. Male sopranos.
25. Letters are what might be said at 5 o'clock.
28. Relationship shows where whisky flask is kept.
29. Makes man blue.
30. Process of promoting growth.
31. Answer rest about small piano.
32. *E.g.*, Old Harry, Satan, the Devil.

DOWN

1. Curse the distinction poetically before the embryological segment.
2. Found in skull of decorated animal.
3. Doctor starts powerful habit-ending.
4. Passing out.
5. May hold its end.
6. One role of leucocyte.
7. Silvery? That's the limit!
11. The last word.
15. The last milk.
17. Noise bull makes cannot be explained!
19. Touching nerve?
21. Occurs between birth and death.
23. Type of fever.
24. Disbelief of a single article being many.
26. Learn about the girl and make a hit!
27. Discharge.

Notes to No. 9

18*a*. A.D.+it.
19*d*. "Tar" in "slings."
25*d*. In+veigh.

NAME .....
(IN BLOCK LETTERS)

ADDRESS .....
(IN BLOCK LETTERS)

.....

Solutions should have "CROSSWORD" written on the envelope, which should be addressed to the Editor, Guy's Hospital Gazette, Guy's Hospital, S.E. 1. They must be sent in before Tuesday, 9th January.

A Prize of 5s. is offered for the first correct solution to be picked out of the hat.

Winner of Crossword No. 9: A. Gordon-Taylor, St. Albans.

SOLUTION No. 9

E	V	A	C	U	A	T	I	O	N	W	A	R	D	S
M		R		P		A		W		E		U		U
O	L	E	C	R	A	N	O	N		E		M		R
L		O		O		N		I	N	K	L	I	N	G
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A		E		V		H	A	U	L	A	G	E		L
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A		T		I		R	E	F	E	C	T	I	O	N
S		O		G		E		I		E		N		G
H	A	R	D	H	E	A	R	T	E	D	N	E	S	S

Correspondence

Second Thoughts on Returning to Guy's

To the Editor of the GAZETTE

SIR,—It is our belief that these troubled times are leading us too far away from the ordinary amenities of life, and it is our purpose in this letter to lay the foundations of a small crusade for the preservation of our simpler pleasures. We are starting with English Prose, since this subject, deserving of a crusade in itself, also gives us opportunity to indulge in one of the small joys of peace-time life, namely having a little fun with Mr. Layton.

We do not wish to detract in any way from the praise which should deservedly accrue from his article, (or should we say "steal his thunder"?), in your issue of November 4th. Indeed, we side with him so wholeheartedly that we feel that his orientation towards the psychological aspects of illness should be more generally stressed and that more psychiatric teaching—if the curriculum would allow it—should be given in this direction rather than in that of the more recondite mental ailments.

But Mr. Layton is so closely associated in our minds with the exposition of grammar—not always, it is true, in a manner which commanded our agreement—that it is a pleasure to raise a few syntactical questions which arise from this last article.

"I have had a cerebral abscess that I believe we have pulled through . . ." Now, we will not cavil over such small points as whether or not Mr. Layton has really had a cerebral abscess (he seemed in robust health when last we saw him, but such an illness might account for this literary decline), or, if so, through what his abscess was pulled; nor even as whether it is possible for a "mastoid" to "flare up into an alarming state."

When we read, however, ". . . A little old gentleman with a doubtful ear that proved on opening the mastoid to be a true bill . . . ," we feel that Mr. Layton, always the master of the Johnsonian aphorism, is perhaps less at ease with the short sentence. The result of his economy of words conveys little to us except that the "little old gentleman" was apparently a sceptic, and leaves us wondering whether the "b" in "bill" should not have been bigger.

Again, ". . . now that we can watch an ear case under the guidance of chemotherapy the number of operations in the acute invasive stage will probably diminish, and this will result in some escaping it altogether." Of course it is no part of our war aims to teach otology, but the author's statement, as we understand it, is that specific chemotherapy will increase that percentage of fortunate people whose ears escape acute streptococcal invasion. We must be forgiven if our ears are doubtful.

There is another puzzle. ". . . The next was an infant with otitis media. I thought, at first, that the lady who held her was her grandmother; the fact that she was the only child of a woman well on in life was enough to account for the state of anxiety that had been transmitted to the child . . . ." We have abandoned efforts to discern the meaning, for while we have some idea of what was what, we still don't know who was who.

There are other sentences the structure of which we would question, but this is enough. It is a sad task that you have, Sir, to preserve prose as it should be written, and when the cause is abandoned by a man of Mr. Layton's calibre, then truly we may sigh with you "Quis custodiet ipsos custodes?" *Lebensraum* may soon be lost to us, but leave us yet our language.

We are Sir,

Yours etc.,

ADRIAN HILL,
MAURICE PARTRIDGE,

Ashtead,
Surrey.

"The Lancet" and the War

To the Editor of the GAZETTE

SIR,—Many of your readers are now separated from their libraries, where the current medical literature is to be seen. The medical societies, too, have had to curtail their activities, and the ordinary contacts—in common-room and unions—are interrupted. Yet the need for knowing what is going on in medicine is greater than ever, for in war time changes in medical practice and administration are always more rapid than in peace. The *Lancet* is doing its best to help medical students and recently qualified doctors in these perplexing days. Beyond expectation much valuable original work has been submitted for publication, while the leading articles and annotations have kept count of the application of such work to the needs of the time. A new feature has been a running story from many pens of the doings of migrated hospitals and schools. Par-

liamentary thought on the floor of the House is reflected by our own representative there.

For these reasons the *Lancet* may be regarded as playing an essential part in medical education, and the Proprietors have asked me to draw attention to their special offer whereby students may take it at a quarter the usual price (10*s*. 6*d*. per annum), while recently-qualified men may take it at half the usual price (£1 1*s*. 0*d*. per annum). Subscriptions should be sent to the Manager of the *Lancet*, 7, Adam Street, Adelphi, London, W.C.2, and he should be kept informed of any changes of address.

Yours, etc.,
THE EDITOR OF THE "LANCET."

The *Lancet*, Ltd.,
7, Adam Street,
Adelphi, W.C.2.

Sector News

Guy's Letter

Christmas Day, 1939

EARLY on Christmas morning a strange noise was heard in the Out-Patients' Hall. Bicycles were being ridden in all directions and at all speeds, often crashing into each other. The party was a happy one and had returned home after a cheerful Christmas Eve. Having grown tired of cycling, the "boys" decided to sing carols, thus awakening successively the patients, the Home, and Nuffield. Words failed them, but the tunes were vaguely familiar.

A little later the Hospital heard some proper carols as the nurses went round the wards. Outside Nuffield House they chanted "Christians, Awake"—but it was still much too early. The patients awoke to find the wards decorated with Christmas trees, holly and coloured lights. Addison was honoured by the exclusive visit of Father Christmas to distribute his presents. A procession of Hospital dignitaries came to visit the wards, which suddenly became neat and tidy as the advance of the procession was announced. Then we were ready for a real old-fashioned Christmas Dinner, with turkey and plum pudding in spite of the war.

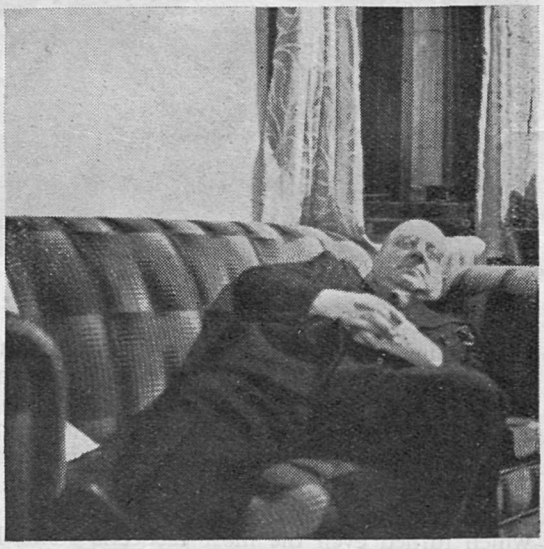
In the afternoon the Starlings did a round of ward concerts. They included Hélène and Pam and were ably compèred by Messrs. Musgrove and Gordon. The Bockner Brothers supplied electrical harmony on their guitars. Then followed the usual run of tea-parties in the wards. By now we were beginning to feel a little weary, and our capacity was almost complete. We had not finished however. We were escorted away from the wards to dine in the Nurses' Home at Matron's kind invitation. Another very excellent meal this was, again consisting of turkey and plum pudding, which some of us had faced already earlier in the day in other parts of the Hospital. In spite of this we rose manfully to our task and sought to do justice to our hostesses.

As we crept back slowly and heavily through the foggy Park to our respective dwellings, we reflected that people had wished us earlier in the day "A Happy Christmas." Yes, we believe that the patients would agree with us that we have all had a very happy Christmas Day here at Guy's.

"REPLENUS."

Orpington Letter

AFTER almost a month of waiting we are now again receiving occasional convoys, and in time we will no doubt be housing the greater part of the old age pensioners of the Borough of Lewisham. We are glad indeed to be able to fill our beds at all, but the similarity between our "War Hospital" Wards and of those still occupied by the Infirmary is becoming depressingly obvious. However, as our photo-

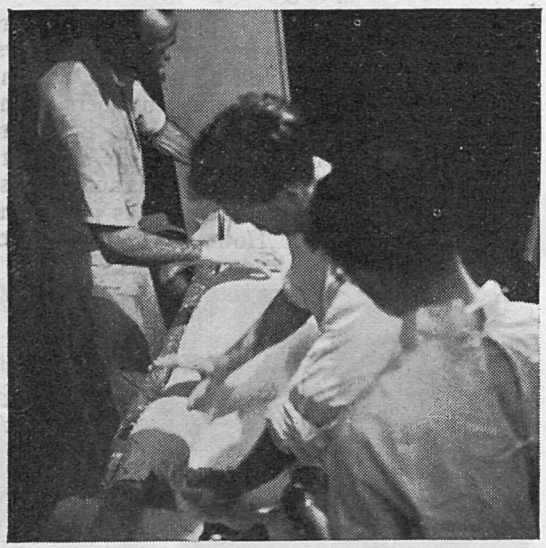


"Lo, sleep it is a gentle thing"

graphs show, every now and then we have enough work to keep us busy and to make us tired, even if mostly we have too much time in which to take the Orpington air, to play darts, to visit the Maxwell—in fact, generally to kill time.

Out Christmas season started with a grand pantomime, " Dick Orpington," written, produced and performed by the Massage Department under the able leadership of Sister Evans. The size and enthusiasm of the audience was ample proof of its well-deserved success. A review and photographs of this will appear in our next letter.

Without the financial aid with which we are usually showered at Guy's, decorations and presents were not quite on the same scale as we remember them in former years there, but the results did great credit to the Sisters and nurses and provided a worthy background to the festivities. On Christmas morning a visit from Father Christmas disguised as Dr. Scott was much appreciated by the patients. He was conducted round by Mr. Kilpatrick, who had just returned



" Industry "

after taking to himself a wife. (Herewith our congratulations and best wishes for " Kilp " and Mrs. " Kilp's " future happiness.) The traditional dinner of turkey and Christmas pudding (and K.C.C. brandy will really burn) reduced the patients to a stuporose condition till tea, when a magnificent meal was provided in each ward, which turned even the most cachectic stomachs mildly manic. Exercising strong self-control, however, not one peptic ulcer patient perforated and not one diabetic patient went into a coma. On Boxing Day we were entertained to excellent dinner by the Matron, Sisters and nurses of Orpington.

Alas, the Christmas season is almost over and our life of hectic gaiety must soon return to its former slow and, we hasten to point out, dignified pace. Picture to yourselves the day of an M.O. at Orpington War Hospital. Get up 9 a.m., look into a ward 10 a.m., coffee 11 a.m., play darts and Maxwell 12 mid-day, wireless news and lunch 1 p.m., go to sleep 2 p.m., look in at a patient 3 p.m., news and tea 4 p.m., play darts 5 p.m., look in at a patient if one can stand it, and then go to Maxwell 6 p.m., dinner in billets 7 p.m., bright conversation with billet 8 p.m., mental fatigue 9 p.m., visit to Maxwell 10 p.m. or earlier, sink into bed 11 p.m. If slow, is that not dignified? However, will any kind person present us with excitement? Will ten appalling appendices, or ten dreadful diabetic comas, or ten really difficult diagnoses please walk into our Receiving Room? Or, Hitler, what about that air-raid?

J. L. R.

Pembury Letter

WITH the advent of winter the Pemburians have seen fit to cover their woad-stained bodies with the skin of bear and mountain goat, and to bury in the snow great haunches of venison. Some, no doubt, have had the foresight to interr a pat or two of butter as well, thus to fortify themselves against the rigors of an icy clime.

It was with great pleasure that we heard of Dr. Cameron's appointment as adviser to the Ministry of Health. This is surely a great honour to a great man as well as to the Guy's pædiatric department, which he founded and built up. At Pembury we regret that he is no longer on our staff, and we shall miss those fascinating anecdotes about Byron's feet; a tennis star's tuberculous mesenteric glands, and a church dignitary's asthma; but most of all we shall miss his uncanny knack of tactfully telling us what the diagnosis really is! In Dr. Cameron we have a constant reminder that one must measure a man from the neck upwards, rather than in the opposite direction.

We still cannot vie with our contemporaries in the production of revues, thrillers and other examples of dramatic art, but we believe that there is an embryo entertainment whose period of gestation will shortly come to term. We wish it every success. If, however, the lighter side of life

is somewhat subdued, we can offset this by the fact that we have been able to secure the co-operation of the Physiology Department in assisting us to probe the mysteries of suffering humanity.

We take this opportunity of extending the Compliments of the Season to all Guy's men at home and abroad. May 1940 not require you to consume an Ersatz egg with your Macon.

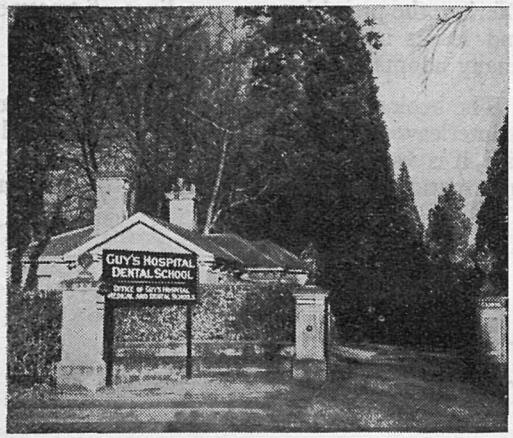
"This is Station Bremen, Reichsender Köln and Station D.J.A. on the 32-metre waveband. That is the end if our news bulletin in English."

N. M. J.

The Dental School at Sherwood Park

SINCE a brief description of the Dental School in its new quarters was published in the last issue of the *Gazette* we have obtained some photographs which may be of interest to readers.

We are happy to say that the attendances at the Clinic are showing a steady increase and there are definite signs of being firmly established. On Friday, December 22nd, the School closed down for the Christmas holidays, and is resuming on Tuesday, January 2nd.



Entrance

A very successful Christmas Party was held on the Thursday evening; very effective decorations were put up at the last minute, and an excellent dinner was provided, after which Father Christmas distributed presents from the tree. After a short and excellent cabaret, dancing went on into the early hours of the morning, in fact, for all the occupants of Sherwood Park the festive season started early, and it is hoped that all will continue to enjoy their holidays.

Conservation Room

Many of the fourth-year students who are going back to Guy's on January 1st were saying "Good-bye" on the Friday morning, and one could not help but notice a slight reluctance to be leaving their friends who are staying on at Sherwood Park.

G. S. L.

Reviews

The Practitioner's Pocket Book. By D. S. DAVIES, D.M. (Oxon.), F.R.C.S. (Edin.). Published by John Bale. First Edition, 1939. Price 7s. 6d.

HERE is a little book which fits snugly into the hip-pocket and which is ready to provide suggestions as to treatment and diagnosis. One pictures the busy practitioner retiring from the consulting room, ostensibly to answer the telephone, but actually to look up the treatment of ringworm. This book would be useful also in Out-Patients where now one can only look furtively through the pages of the Pharmacopœia,

hoping that the patient will not think one an ignorant doctor, and hoping that ones eye will chance to fall upon some effective drug or mixture. Taken thus in its correct place as a stimulus to the memory, the *Practitioner's Pocket Book* will serve its purpose well. Amongst its pages are useful standards—otherwise easily forgotten, calory values, details of fevers, and stock mixtures, as well as descriptions of medical and surgical conditions. It is unfortunate that the Author uses the metric system for all his weights and measures—occasionally he inserts the equivalent in ounces and grains, and we know where we are.

The signs and symptoms leading to the diagnosis of various conditions are dealt with fully, in places being tabulated. Such points however are essentially individual in relation to doctor and patient alike, and are difficult to define in the written word (see Passim).

Treatment is of the blunderbuss type—patent medicines, drugs, operations are all strung together leaving the doctor a wide choice of the principles to adopt. Where treatment is ineffective the author is not defeated but says "try . . . . . ."

The book would be a danger to the student preparing for examinations, because no indications are given as to the various measures beneficial in any particular case. Thus, under "Foreign bodies in air and food passages" we have, "X-ray, do not leave patient alone. If foreign body is in air passage and transport is necessary, do tracheotomy before moving." No mention is made of the fact that tracheotomy is only indicated if the foreign body is impacted above the vocal cords. It goes on: "do laryngoscopy, bronchoscopy, œsophagostomy, etc." This is a fearsome list of procedures though each may be indicated in an individual case. We feel œsophagoscopy should precede the more radical operation.

Following the alphabetical list of medical and surgical conditions there are two useful appendices. The first deals with drug actions and their indications, and includes long lists of the trade preparations of the drugs. The second discloses the truth about the many medicinal preparations on the market. Both these lists will prove invaluable to the general practitioner.

The use of the sulphanilamide group of drugs is not stressed and even comes well down in the list amongst the treatments advocated for gonorrhœa, after T.A.B. vaccine, manganese butyrate, and sulpharsenol. But it is missing the point of this book to criticise its detail. It succeeds in offering the practitioner some lines of treatment and leaves it to his judgement which course he finally adopts.

The book is well printed in a neat binding and is interleaved with blank pages. Though small in size, it is worth its price for the vast amount of information concentrated into such a small volume.

H.F.L.

Hospital Information, etc.

Pass List

UNIVERSITY OF CAMBRIDGE.
FINAL M.B. EXAMINATION.
Michaelmas Term 1939.

PART I.

Surgery Midwifery and Gynæcology.

W. B. D. Maile — G. T. G. Thomas
A. Ponder

Papers by Guy's Men

Brooke R. and Another. Two cases of grease-gun finger. *Brit. Med. J.*, 1939, ii, 1186.

Ellis, Richard W. B. The use of irradiated evaporated milk in infant feeding. *Arch. Dis. Child.*, 1939, xiv, 295.

Changes of Address

Sir Arthur Hurst, Red Gables, Headington, Oxford. Tel. Oxford 6916, and 87 Harley Street, W.1.

Robert Balderston, M.B., "Madeline," 115 Daytona, Way, Herne Bay, Kent. *Tel.* Herne Bay 643 (Retired.)

G. Kenneth Lacey, L.D.S., R.C.S., 46, Manor House, London, N.W.1. *Ambassador* 2352.

Marriage

LACEY—PRICE.—On December 16th, 1939, at the Church of Annunciation, Bryanston Street, W.1, G. Kenneth Lacey, of Brixton Road, S.W.9, to Betty Price, of Seymour Street, W.1.

DYKE—WALKER.—On Saturday, 23rd December, 1939, at Thorne Parish Church, Near Doncaster, Yorks, W. Robert Dyke to Eleanor L. Walker.

EDS. { E.B.R. / H.F.L.